

WINSTON BROS. CO. AND THE UTAH CONSTRUCTION CO.
AND THE J. A. TERTELING & SONS, INC.

FEBRUARY 21, 1956.—Committed to the Committee of the Whole House and
ordered to be printed

Mr. MILLER of New York, from the Committee on the Judiciary,
submitted the following

R E P O R T

[To accompany S. 1905]

The Committee on the Judiciary, to whom was referred the bill (S. 1905) for the relief of Winston Bros. Co. and the Utah Construction Co. and the J. A. Terteling & Sons, Inc., having considered the same, report favorably thereon with amendments and recommend that the bill do pass.

The amendments are as follows:

Page 1, line 5, strike out "Brothers", and insert "Bros."

Page 1, line 7, strike out "and" and insert "&"; same line strike out "Incorporated" and insert "Inc."

Page 2, line 16, after the word "Act", insert "in excess of 10 per centum thereof".

Amend title so as to read:

A bill for the relief of Winston Bros. Company and the Utah Construction Company and the J. A. Terteling & Sons, Inc.

The facts will be found fully set forth in Senate Report No. 1134, 84th Congress, which is appended hereto and made a part of this report. Your committee concurs in the recommendation of the Senate.

[S. Rept. No. 1134, 84th Cong., 1st sess.]

PURPOSE

The purpose of the proposed legislation, as amended, is to carry out the findings of the Court of Claims resulting from Senate Resolution 343 of the 82d Congress which referred to that court the bill S. 3326 for the relief of certain Midwest contractors.

STATEMENT

In the fall of 1947, Winston-Utah (a joint venture composed of Winston Bros. Co., a Minnesota corporation, and Utah Construction Co., a Utah corporation) and J. A. Terteling & Sons, Inc., an Idaho corporation, were engaged in the performance of contracts with the United States Bureau of Reclamation, Department of the Interior, for the construction of canals, siphons, dams, and other facilities relating to irrigation under the Columbia Basin project. These contractors were proceeding with the performance of their work under schedules and at rates of progress of their own choosing and calculated to complete the performance of their contracts within the required time.

In August of 1947 these contractors were told by representatives of the Bureau of Reclamation that Congress had not appropriated sufficient funds to permit the continuance of their work at an orderly and economic construction schedule and that the contractors would have to curtail their operations and slow down the work so as to fit or tailor the pace of their work to the amount of money allocated to each of them by the Bureau of Reclamation out of funds appropriated by Congress.

Both of these contractors did so curtail and slow down their operations which, of course, increased their costs of performance in many ways.

Several contractors performing work under contracts with the Bureau of Reclamation in the Central Valley of California had been faced with much the same situation and had been granted legislative relief by Congress by special appropriation included in the Interior Department Appropriation Act, 1950, 63 Statutes 765, at 782-783. These contractors in the Columbia Basin, having been hurt by substantially the same factual situation, applied to Congress for relief, resulting in the Senate of the United States referring the matter of these contractors' claims to the United States Court of Claims for report to Congress. This was accomplished by resolution of the Senate of the United States, approved June 27, 1952, Senate Resolution 343, Report 1872, 82d Congress, 2d session.

After extended and laborious trial in the Court of Claims, that court has now rendered its decision reporting to Congress pursuant to the above-referenced resolution. The majority of the court found that the contractors had no legal remedy against the United States, the dissenting opinion holding that the Government was legally liable to the contractors. However, the entire court has found and reported that Winston-Utah and Terteling suffered damages through no fault of their own and by reason of the insufficiency of appropriations by Congress, such damages having been found to be \$102,475.41 in the case of Winston-Utah and \$24,666.41 in the case of Terteling.

The substance of the majority decision of the Court of Claims in its report to Congress is as follows:

"The plaintiffs have no legal claim against the Government, they having released the Government from any such claim by section 11 of the specifications of their contracts. For the same reason they have no equitable claim in the sense of a claim enforceable in a court of equity. Two of the plaintiffs, Winston-Utah and Terteling, suffered damages in the amounts of \$102,475.41 and \$24,666.41, respectively, because they were obliged without fault on their part, on account of the insufficiency of the amounts appropriated by Congress, to curtail their operations under their contracts."

Thus, it is established that over 7 years ago these contractors were financially injured by reason of circumstances over which they had no control and without any fault on their part and were obliged, by reason of governmental action; namely, an insufficiency in the amount of funds appropriated by Congress, to incur and suffer damages and additional costs and expenses in the amounts above set forth. Under all of these circumstances it is believed that the Congress of the United States should make these contractors whole for those damages and additional costs and expenses so incurred and that legislation should be enacted to provide payment to Winston-Utah and Terteling in the amounts of such damages found by the Court of Claims to have been so incurred.

Attached hereto for the further information of the Senate is a copy of the opinion of the Court of Claims in this case.

IN THE UNITED STATES COURT OF CLAIMS

Congressional No. 6-52

(Decided April 5, 1955)

WINSTON BROS. COMPANY AND THE UTAH CONSTRUCTION COMPANY; ROY L. BAIR & COMPANY AND JAMES CRICK & SONS; J. A. TERTELING & SONS, INC.; AND T. E. CONNOLLY, INC. v. THE UNITED STATES

Mr. Garfield O. Anderson for plaintiffs. Mr. Sherman E. Burt was on the briefs. Mr. John B. Miller, with whom was Mr. Assistant Attorney General Warren E. Burger, for defendant.

OPINION

MADDEN, Judge, delivered the opinion of the court:

This case has come to us pursuant to a Resolution of the Senate of the United States, approved June 27, 1952, Sen. Res. 343, Report 1872, 82nd Congress, 2d Sess. The Resolution states that there was pending in the Senate a bill, S. 3326, for the relief of certain construction firms, and this court was asked to proceed in accordance with sections 1492 and 2509 of title 28 of the United States Code and to report to the Senate in accordance with those statutory provisions.

The bill referred to in the Resolution proposed to pay to the plaintiffs certain sums as compensation for the increased costs incurred by them as a result of the disruption or delay in their construction work under contracts with the Bureau of Reclamation. The bill stated that the disruption or delay was caused by insufficiency of appropriated funds for payment of normal construction earnings.

Pursuant to the rules of this court, the plaintiffs filed a petition, the case was referred to a Commissioner of this court who held extensive hearings at places convenient to the parties. He made findings of fact, the parties took exception to certain of his findings, filed briefs and made oral arguments to the court.

Each of the four plaintiffs had a contract with the Government, which acted through the Bureau of Reclamation of the Department of the Interior. Each contract was for the construction of some facility intended to make the water impounded by the Grand Coulee Dam on the Columbia River in the State of Washington available for irrigation. The four plaintiffs, two of which were joint ventures, will be designated in this opinion as Winston, Bair-Crick, Terteling and Connolly. Winston was to construct two canals; Bair-Crick was to construct an earthen dam; Terteling was to construct an earthen dam and portions of a canal; and Connolly was to construct a tunnel and a "siphon". The period of performance of the contracts was 800 days as to two of them and 900 days as to the other two. All of them, therefore, contemplated work extending beyond the fiscal year in which the contracts were made, and into the fiscal years ending June 30, 1948, and June 30, 1949.

Each contract contained the following provision:

Specifications par. 11.

Failure of Congress to appropriate funds. If the operations of this contract extend beyond the current fiscal year, it is understood that the contract is made contingent upon Congress making the necessary appropriation for expenditures thereunder after such current year has expired. In case such appropriation as may be necessary to carry out this contract is not made, the contractor hereby releases the Government from all liability due to the failure of Congress to make such appropriation.

The authority for the Bureau to make contracts which contemplated payments being made from funds not yet appropriated was contained in the following provision of 43 U. S. C. 388:

When appropriations have been made for the commencement or continuation of construction or operation and maintenance of any project, the Secretary may, in connection with such construction or operation and maintenance, enter into contracts for miscellaneous services, for materials and supplies, as well as for construction which may cover such periods of time as the Secretary may consider necessary but in which the liability of the United States shall be contingent upon appropriation being made therefor.

There were many other contracts, in addition to those of the plaintiffs, for construction in connection with the Columbia Basin Project. There were additional power units to be installed in the dam for the generation of electricity, there were pumps for the pumping plant to lift the water, impounded by the Grand Coulee Dam over to the reservoir from which it could be carried by gravity

to the some 400,000 acres of land which it was intended to irrigate. In making up its estimates in 1946 for the money which it would need to carry all these things forward in the fiscal year beginning on July 1, 1947, and ending on June 30, 1948, the Bureau of Reclamation arrived at a figure of \$62,500,000. The Secretary of the Interior cut this figure back to \$52,500,000. The Bureau of the Budget approved a figure of \$27,500,000. The House of Representatives included less than half that amount in its bill; the Senate included a higher figure; the bill went to a Conference Committee which agreed to \$17,500,000, and the bill containing that amount was enacted.

The Managers on the Part of the House of Representatives, in reporting the results of the Conference to the House, appended to the report of the Conference Committee the following statement:

Realizing that repayment of construction cost is an essential part of the reclamation policy, and that a major portion of repayment of the cost of the Columbia Basin project must depend upon power revenues, the conferees are agreed that funds provided in the bill should be so allocated as to permit completion and installation of the six generators presently on order for this project at the earliest possible date.

This statement meant that there were ready cash customers for all the power that could be generated at the dam, and that the prompt installation of the additional generators, the manufacture and installation of which had been delayed by World War II, would be the quickest way to secure some additional income to offset the Government's vast expenditures on the Columbia Basin project. The irrigation facilities, on which the plaintiffs were working, would not, at best, have led to the receipt by the Government of any income until several years later.

The officials of the Bureau of Reclamation took the statement above quoted of the Managers on the Part of the House as law. While it was not in the Conference Report, it said that the conferees had agreed that that was the intention of the appropriation. There was, and is, no reason to doubt the truthfulness of the statement. In the circumstances it was the duty of the Bureau of Reclamation to respect the known intent of the responsible managers of the legislation.

The officials of the Bureau of Reclamation were faced, then, with the problem of how to use the appropriated funds which were not sufficient to permit the carrying on of the work contracted for, and at the same time pay for the maintenance of the Bureau's own organization, and for some materials not yet contracted for, but which were necessary, at that stage, for the orderly development of the project. Our finding 8 shows the allocation which the Bureau made. Even the expenditures directly related to, or incidental or necessary to the carrying out of the power programs, were cut back from \$22,313,000 to \$16,254,000. The balance of the money, including a carryover of nearly \$4,000,000 from the preceding appropriation, was allocated as available for the continuation of the irrigation features of the project. But of this amount, \$1,071,000 had, when the Bureau's allocation was made on August 8, 1947, already been covered by the estimates for the irrigation work done in July. The money for irrigation for the remaining eleven months of the 1948 fiscal year was only \$4,015,000.

The irrigation contractors, including the four plaintiffs in this suit, would have required an estimated total of nearly \$14,000,000 to have proceeded on full schedule for the remaining eleven months of the fiscal year. They would have required \$7,393,000 to have continued on full schedule through January 1948. Consideration was given to that date because it was hoped that by February 1, Congress might have appropriated additional money for the project.

When the problem was considered in August, 1947, there were three ways in which the money allocated for irrigation might have been used. The contractors might have been authorized to proceed at regular speed, in which case the funds would have been exhausted in October. They might have been required to slow down to such a rate as would have distributed the reduced available funds over all the remaining months of the fiscal year. That would have tied up equipment and resulted in overhead expense disproportionate to accomplishments. The third possible method was to apportion the available funds for expenditure during the months ending with January 1948, thus permitting the contractors to maintain, to a considerable extent, their working organizations, and be ready to proceed at full schedule if Congress did, as it was hoped it would, appropriate the necessary funds by that time.

Mr. Banks, the District Manager of the Bureau, met with the irrigation contractors on August 12. He told them that if they could agree among themselves as to a proper apportionment of the funds under the third alternative the Bureau would adopt it. If that was done, the individual contractor would be permitted

to use up his money on whatever features of his work he chose. The contractors protested the fact that the appropriation was insufficient. They disagreed among themselves as to the allocation among them of the available funds. At later meetings, on August 14 and 16, adjustments were made in the tentative allocations to the individual contractors, and the contractors reluctantly agreed to the allocation to each contractor of a specified amount of the reduced funds. They did not waive their objection to the fact that they were not to be permitted to proceed on their regular schedules. The final allocation to the irrigation contractors was \$1,430,000 more than the \$4,015,000 which was thought to be available. The Bureau was able to make its payments under this increased schedule, from what source the record does not show. Perhaps there was a larger carryover from the preceding year than had been counted on; perhaps some of the contractors did not use up all of the funds allocated to them; perhaps the apparent deficit was made up out of the supplemental appropriation which became available in December, 1947, which was sooner than had been anticipated.

About September 1, 1947, Mr. Banks addressed to each of the irrigation contractors an "Order for Changes" which stated how much the contractor would be permitted to earn under the reduced schedule, and how many days his time for completion of his entire contract would be extended, because of the curtailment of funds. The proposed change orders were not accepted by any of the contractors. They protested that the extensions of time were insufficient, and that their rights to recover damages for delay in performance were not preserved. After discussion during the early part of September, extensions of time were fixed by the Bureau, in one case considerably greater than had been proposed in the September 1 letter. No further attempt seems to have been made to get the contractors to agree to formal change orders. On November 26, 1947, letters were written to the contractors extending their times for performance by the number of days which the Bureau had decided upon early in September, except in the one case noted above.

The plaintiffs, and presumably the other irrigation contractors, proceeded on the basis of their reduced allotment of funds. Congress reconvened during December, 1947, and by supplemental appropriations made sufficient funds available to permit resumption of full construction schedules on the irrigation contracts for the remainder of the fiscal year. On December 26, 1947, the Bureau by letter advised the contractors of that fact, but did not specify an amount which would be available to any particular contractor. On February 6, 1948, each contractor was advised of the amount available to it, an amount which would permit full scale operation for the balance of the year.

The plaintiffs assert that they did, in fact, curtail their operations because of the shortage of funds; that by reason of the curtailment their schedules were disrupted, their equipment was caused to stand idle, and their overhead expenses continued without their being able to obtain earnings proportionate to the overhead. They urge that the Bureau of Reclamation had no legal justification for curtailing their funds. They say that Congress' appropriation of \$17,500,000, plus the carryover from the preceding year, was more than sufficient to keep the irrigation contracts going, if it had been used for that purpose, which, they say, it should have been. They base their argument that the appropriation, if insufficient for all the requirements of the Columbia Basin project, should have been used first for the irrigation features upon earlier legislation and one judicial decision. They cite the title to the original Reclamation Act of 1902, 32 Stat. 388, which named only irrigation as the objective of the Act. They cite the 1906 Amendment of the Reclamation Act, 34 Stat. 116, 117, Sec. 5, which first authorized the Secretary of the Interior, if the development of electric power was necessary for irrigation purposes, to lease any surplus power or power privilege, but said:

Provided, that no lease shall be made of such surplus power or power privilege as will impair the efficiency of the irrigation project.

They cite *Burley Irr. Dist. v. Ickes*, D. C. Circ., 116 F. 2d 529, which cited and enforced the statutory provision quoted from the 1906 Act. They quote Sec. 2 of the 1935 Act authorizing the construction of the Grand Coulee Dam, 49 Stat. 1028, 1039, which mentions the generation of electric energy only "as a means of financially aiding and assisting" the flood control, navigation and irrigation features of the project. They point to the Reclamation Project Act of 1939, 53 Stat. 1187, 1195, which said:

No contract relating to municipal water supply or miscellaneous purposes or to electric power or power privileges shall be made unless, in the judgment of

the Secretary, it will not impair the efficiency of the project for irrigation purposes.

They show that the above language was incorporated by reference in the Columbia Basin Project Act of 1943, 57 Stat. 14. They quote a statement of the House of Representatives Committee on the Interior Department Appropriation Bill of 1949, as follows:

Statement of policy.—The committee desires to reemphasize its statement in former reports on the bill, that the reclaiming of arid lands by the construction of reclamation projects is and always has been the primary purpose of the reclamation laws. Development of hydroelectric power is incidental to irrigation and is made as a means of financially aiding and assisting such undertakings. This policy should not be departed from without specific legislation by the Congress.

The plaintiffs argue, from the premises above recited, that the officials of the Bureau of Reclamation were required by law to allot the limited funds which they were given to irrigation work rather than to power work. We do not agree. The specific intention of the Congress which made the 1948 appropriation, or at least of the conferees who finally agreed, for their respective bodies, to the appropriation, was officially made known to the Bureau by the statement of the House Managers. If that intention was a departure from a previous long standing policy of Congress, it was no worse for that, as Congress of course had the power to change that policy at its will. Perhaps the statement of the House Committee on the 1949 bill was an expression of regret that there had been a lapse from the policy in the 1948 Act. We think that the Bureau was legally justified in giving the preference that it did to the power features of the project. We also think that Congress would not have intended that the Bureau should make cuts much deeper than it did make in its permanent staff and expenses in its Denver office and its regional office, or in its wage board payrolls for work on force account. Any further saving which would have been of substantial benefit to the irrigation contractors would seem to have required the substantial disruption of the Bureau's permanent organization and, as we have said, we think Congress would not have intended that.

Assuming, then, that the Bureau's allotment between power and irrigation was lawful, we reach the Government's defense that it was not a breach of contract for the Government to fail to make funds available to pay for work for which it had contracted. The Government bases this defense upon the provision of the contracts which we have quoted earlier in this opinion. That provision, Paragraph 11 of the Specifications, said that if the operations of the contract extended beyond the current fiscal year, the Government would not be liable for the consequences of the failure of Congress to appropriate funds to carry out the contract.

The plaintiffs urge that this provision is no defense. They point to the language "In case such appropriation as may be necessary to carry out this contract is not made * * *", and say that, taking each plaintiff's contract by itself, there was plenty of money appropriated to carry it out, even after giving the preference to the power features of the project. We think that this is a too literal reading of Paragraph 11. It would make the provision practically inapplicable except in cases where specific parts of appropriations were earmarked for particular contracts. We think the provision at least means that where the agency authorized to spend the appropriation allocates the funds on a rational and non-discriminatory basis and they prove insufficient, the Government is not liable for harm resulting from the shortage.

From what we have said it follows that in our opinion the contractual provision forecloses the plaintiffs from having any judicially enforceable claim against the United States.

We have, however, considered the facts of the case with a view to informing the Senate as to the amount of the damage which, in our view, the several plaintiffs suffered because of the insufficiency of the appropriated funds.

WINSTON-UTAH CLAIM

The plaintiff Winston-Utah had two contracts, one for the "West Canal" and the other for the "East Low Canal". A detailed recital of the facts concerning this plaintiff's claim is given in findings 18 to 31. By the end of July 1947 the West Canal was ready for concrete lining and for the construction of the two appurtenant concrete siphons. All this work was planned to be completed in the fall of 1947. Work on one of the siphons was discontinued on September 4 at which time eleven sections of the siphon were completed. This work would have, but for the shortage of funds, continued until November 8, at which time the

plaintiff would have closed down all concrete work, in any event. The plaintiff lost 2.2 months of time on that siphon. No concrete lining on the West Canal was done that fall. The specially made equipment for that work was not delivered until September and it could not have been assembled and ready for operation before September 22. The plaintiff lost 1.7 months on that work. In substantially the same circumstances the plaintiff lost time amounting to 1.8 months on the siphons for the East Low Canal. The plaintiff did not curtail any of its operations until September 4, and it did not curtail excavation in the East Low Canal at any time, this excavation work being continued through the winter. Mathematically it works out, as shown in our findings, that the plaintiff's work was slowed down by 79.4% during the period September 4 to November 8. We have applied this percentage to the plaintiff's fixed charges. As to its equipment, made idle by the curtailment of funds, the plaintiff in filing its claim with the Bureau of Reclamation used a formula which we are not familiar with, and which seems to us to give inadequate compensation. We have applied our usual formula to this item, eliminating however items already covered in the schedule of fixed charges.

Because of the shut-down of concrete work in September 1947 the plaintiff in order to get that work started as soon as the weather was suitable in 1948, set up its concreting equipment in February and March 1948. There was a considerable loss of efficiency of labor on account of the season, and we have made an allowance for that. We have also made allowances for a part of the cost of additional equipment purchased in 1948 partly to make up for time lost during the curtailment, and for increased costs of cement and carpenters' wages in 1948 over 1947. Our computation gives us a total figure of damages suffered by Winston-Utah of \$102,475.41.

TERTELING CLAIM

Terteling had two contracts, one for the construction of Long Lake Dam and one for the construction of a part of the Main Canal. When funds were curtailed, it elected to continue full scale operations on its Main Canal contract. It did so continue, and makes no claim on account of that contract. As to the Long Lake Dam work, our findings 34 to 44 show the facts as we have found them and they will not be repeated in this opinion. Before the curtailment of funds the plaintiff was substantially behind schedule on many items of its contract. To do the work practically and economically it had to be done in a fairly definite sequence and if some key items were behind schedule, other items could not be proceeded with. Also for several weeks after the curtailment of funds had occurred, the plaintiff worked more man-hours than it had done before the curtailment. However, after October 31, 1947, work was slowed down. The plaintiff claims that it would have done concreting work after that date if funds had been available to pay for the work. If such work had been done in the winter, the plaintiff would have been subjected to extra expense for heating the water and aggregate, protecting the concrete after it was poured, and for the general inefficiency of labor in winter weather.

We have concluded that the plaintiff Terteling was subjected to some delay and some extra expense because of the curtailment of funds, and have included the expense of moving some equipment, the loss resulting from idle equipment and some overhead expense, the total amounting to \$24,666.41.

CONNOLLY CLAIM

The facts with regard to the Connolly claim are detailed in findings 45 to 57. Before the curtailment of funds occurred, the plaintiff was already far behind its schedule. It had made a revised schedule on July 8, 1947, which might possibly have permitted it to finish its work on time. To have maintained that schedule would have put the plaintiff to very large extra expense for placing concrete in winter, and for the inefficiency of labor in winter work. But for late completion the plaintiff would have been subject to liquidated damages of \$500 per day, hence it might have been willing to undergo the extra expense of the winter work.

The principal item of Connolly work was the Bacon Tunnel. The original plan was to work from both the north and the south ends of the proposed tunnel simultaneously. It was planned to first make a small tunnel from each end and, when these two had met, draw back to each end and start excavating to the full dimensions of the tunnel. Excavation of the small, or "pilot" tunnel was commenced from the south end in December 1946 and from the north end in April 1947. Theoretically, by working from both ends, the tunnel could be driven in half the time it would take if worked from only one end. But in fact, the work

from the south end went badly. The terrain over which the excavated materials had to be moved was bad, the elevation was unfavorable, and the plaintiff's ventilating equipment for purifying the air in the pilot tunnel after blasting worked badly, causing loss of working time. When the plaintiff on August 18, 1947, immediately after the discussions about the curtailment of funds, closed down the operation from the south end of the tunnel, we think it did what it had wanted to do for some time and had only refrained from doing because of the danger of subjecting itself to heavy liquidated damages for late completion. The shortage of funds discussion had assured the plaintiff of a generous extension of time for completion and relieved it of the pressure to continue inefficient and expensive operation just to gain time.

Our conclusion with regard to the Connolly claim is that, taking into account the accompanying extension of time, this plaintiff was not harmed by the shortage of funds.

BAIR-CRICK CLAIM

The plaintiff Bair-Crick had a contract for the construction of the South Coulee Dam and appurtenant works. This dam was to form the south end of the balancing reservoir 30 miles long into which water was to be pumped from the Grand Coulee Dam, and from which reservoir water was to be taken for irrigation. The South Coulee Dam was 9,900 feet long made of earth and rock fill with a concrete core some 30 feet wide. The details with regard to this plaintiff's work are given in findings 59 to 67. In the fall of 1946 the plaintiff submitted a proposed construction program. By July 1947 the work was several months behind schedule. In July an estimate of this plaintiff's anticipated earnings for the period July 1947 through June 1948 was prepared by the Bureau at the plaintiff's request, and was approved by the plaintiff as prepared. It showed estimated earnings for the months of August 1947 through January 1948, the months during which the curtailment of funds was in effect, of somewhat less than this plaintiff actually earned and was paid during those months. Since the July estimate was prepared before there was any thought of reduced funds or operations, it is apparent that the reduction of funds did not cause the plaintiff to curtail its operations during the pertinent period. If the plaintiff did curtail its operations thereafter, it was because it obtained, in connection with the funds negotiation, an extension of time for completion which removed the danger of its being charged with liquidated damages for late completion.

Sparling Steel Company was a subcontractor with Connolly and Bair-Crick, furnishing steel to them for their contracts. It claims to have been damaged by their delay in accepting steel from it. Since we have found that neither Connolly or Bair-Crick was delayed by the reduction of funds, it follows that Sparling's derivative claim has no basis.

It has been urged on behalf of all the plaintiffs that the extensions of time granted them by the Bureau of Reclamation prove conclusively, or almost conclusively, that they were in fact delayed in their performance for the periods named in the extensions of time. It will be remembered that Mr. Banks of the Bureau first fixed upon the periods of extension before September 1, 1947, and notified the plaintiffs by letters of that date. Because the plaintiffs refused to accept the change orders embodied in those letters, there were no further letters about extensions of time until November 26, 1947, when Mr. Banks again wrote the plaintiffs, unilaterally granting them the extensions of time which he had named on September 1 in the proposed change orders. The only exception to this was in the case of Connolly which had persuaded Mr. Banks to increase its extension from 146 days to 365 days. Estimates made when the curtailment of operations had just begun, on contracts which originally had 800 or 900 days to run, were of course largely guesswork. Banks and the Bureau were embarrassed at having, apparently for the first time, contracted for work which Congress would not support by appropriations. Due to lack of funds, all work on the pumping plant, which was the key structure of the irrigation project, was discontinued. There was, therefore, no longer any urgency for the completion of the canals, siphons and dams which could not be used until the pumping plant was in operation. The Bureau could be and was generous with time. If, with the additional time available, the contractors chose to rearrange their work for greater efficiency and economy, that was to their advantage, and was not a harm resulting from the shortage of funds.

We treat extensions of time granted by contracting agencies on account of action or inaction by the Government as admissions against interest by the Government. That means that they are pieces of evidence in favor of the con-

tractor, to be weighed along with the other evidence as to how much delay was actually caused by the Government's action or inaction. When, as in the instant case, the other and more direct evidence is convincing, the admission involved in the extension of time is of little weight.

Our report to the Senate is as follows:

The plaintiffs have no legal claim against the Government, they having released the Government from any such claim by Section 11 of the Specifications of their contracts. For the same reason they have no equitable claim in the sense of a claim enforceable in a court of equity. Two of the plaintiffs, Winston-Utah and Terteling, suffered damages in the amounts of \$102,475.41 and \$24,666.41 respectively, because they were obliged without fault on their part, on account of the insufficiency of the amounts appropriated by Congress, to curtail their operations under their contracts.

LARAMORE, *Judge*; LITTLETON, *Judge*; and JONES, *Chief Judge*, concur.

WHITAKER, *Judge*, dissenting:

I seriously doubt the right of the Bureau of Reclamation to so allocate the funds appropriated as to prefer one class of contracts over another.

The House managers reported to the House that "the conferees were agreed" that the funds appropriated should be spent first for the completion and installation of the generators. This was reported to the House of Representatives and it may be said that by the adoption of the Conference Report that House gave its assent to such an allocation; but the Senate is not shown to have given such assent. This body did not have before it this statement of the House managers. It had before it only the Conference Report, and this was silent on the basis for the allocation of the funds.

It, of course, takes the concurrence of the two Houses of Congress to pass a bill. They concurred only on the basis of the Conference Report, which, as stated, was silent on allocation.

It, therefore, comes down to this: There were outstanding \$37,359,000 construction and supply contracts and limited force account demands. To carry them on, \$17,500,000 was appropriated. This appropriation, plus the unexpended balance carried over from the previous fiscal year, amounted to \$21,617,000.

It seems to me the several contractors had a right to expect that this amount should be prorated among their several contracts. Since this was not done, I think the defendant is legally liable for the consequent delay.

It would have been otherwise if Congress had directed allocation to the power contracts first, but this was not done.

I, therefore, cannot agree to the report of the majority.

FINDINGS OF FACT

The court, having considered the evidence, the report of Commissioner Paul H. McMurray, and the briefs and argument of counsel, makes findings of fact as follows:

1. This case comes before the court pursuant to a Resolution of the Senate of the United States, approved June 27, 1952, S. Res. 343 (Report 1872), 82d Congress, 2d Session, which Resolution is as follows:

Resolved, That the bill (S. 3326) for the relief of certain construction firms, now pending in the Senate, together with all the accompanying papers, is hereby referred to the United States Court of Claims, and the court shall proceed with the same in accordance with the provisions of sections 1492 and 2509 of title 28 of the United States Code and report to the Senate, at the earliest practicable date, giving such findings of fact and conclusions thereon as shall be sufficient to inform the Congress of the nature and character of the demand as a claim, legal or equitable, against the United States and the amount, if any, legally or equitably due from the United States to the claimants; *Provided, however*, That the passage of this resolution shall not be construed as an interference of liability on the part of the Government of the United States.

Proposed Bill S. 3326, referred to in the foregoing Resolution, is in pertinent part as follows:

A BILL

For the relief of certain construction firms.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, the Secretary of the Treasury is authorized and directed to pay, out of any money in the Treasury not otherwise

appropriated, to Winston Brothers Company and The Utah Construction Company, jointly, the sum of \$184,250.08; Roy L. Blair and Company and James Crick and Sons, jointly, the sum of \$234,499.95; J. A. Terteling and Sons, Incorporated, the sum of \$86,512.15; and T. E. Connolly, Incorporated, the sum of \$779,622.79. The payment of such sums shall be in full satisfaction of all claims of such construction firms against the United States for compensation for increased costs incurred as a result of the disruption or delay of construction work schedules caused by insufficiency of appropriated funds for payment of normal construction earnings during the fiscal year ending June 30, 1948, under the following-numbered Bureau of Reclamation contracts: Winston Brothers Company and The Utah Construction Company, contracts numbered 12r-16197 and 12r-16796; Roy L. Blair and Company and James Crick and Sons, contract numbered 12r-16203; J. A. Terteling and Sons, Incorporated, contract numbered 12r-16745; and T. E. Connolly, Incorporated, contract numbered 12r-16311.

* * * * *

In reporting the Resolution the Senate Committee of the Judiciary stated *inter alia*:

It is the view of the committee that the Columbia Basin contractors are possibly deserving of relief, but the facts and circumstances are of such complexity that the committee is unable to arrive at a fair and just determination. In these circumstances it is deemed particularly appropriate to utilize and apply those provisions of law providing for the referral of such cases to the Court of Claims, which in turn is equipped to make the necessary findings of fact and conclusions thereon sufficient to base informed action subsequently by the Congress.

2. The Columbia Basin Project is located along the Columbia River in Central Washington and consists of three major phases; a dam across the Columbia River at Grand Coulee, known as Coulee Dam; the generation of electrical power; and the irrigation of adjacent arid lands. The Project is under the administrative jurisdiction of the Bureau of Reclamation, Department of the Interior.

Actual work on the project commenced in 1933 and at the time of this country's declaration of war in December 1941, the Coulee Dam itself (exclusive of the power houses and the irrigation works) had been largely completed. The design of the dam called for two power houses situated one on the west and one on the east bank of the river. Each power house was designed to accommodate nine main power generating units of a rated capacity of 108,000 kilowatts each, or a total of 18 such units, plus three service units of 12,500 kilowatts each. The total rated capacity of both power houses was some 2,000,000 kilowatts of power when all units were installed and operating. Since the completion of the power houses there has been generated as much as 2,250,000 kilowatts of power.

At the beginning of the war, three of the main power units and one service unit had been installed in the west power house and six more main units were on order but work on the units on order was stopped by the War Production Board, pending further investigation of the need therefor in the light of wartime demands for labor and strategic materials. However, the shipbuilding program, the need for production of aluminum for airplane construction, power needed for the nearby Hanford atomic works, and other wartime activities in the Pacific Northwest made it imperative that additional electric power be supplied. As a result of this urgent demand, work on three of the main units on order, which had been previously stopped, was permitted to proceed. In addition two smaller units were borrowed from Shasta Dam in California. All of these units were installed in the west power house and put into service during the war period, making a total of eight main units and one service unit in the west power house, but none in the east power house.

3. At the beginning of World War II, construction work had not yet commenced on the irrigation phases of the project, and during the war years all irrigation work, except for some surveys and investigations, was suspended.

At the close of the war, a program for the irrigation of some 400,000 acres of land by 1950 or 1951 was planned. One of the objectives of such program was to provide employment and settlement opportunities for returning War Veterans. The irrigation required, as a first prerequisite, the installation of a pumping plant at the dam to be operated by the electricity there generated which would be capable of pumping water from the dam reservoir to an elevation of sufficient height to get it into a balancing reservoir formed in a prehistoric river bed or coulee known as Grand Coulee. The construction of two earth-filled dams some 25 miles apart at the coulee's north and south extremities would impound the water so pumped into

the balancing reservoir from which it would flow by gravity to the arid farm lands some 30 to 50 miles distant through a series of canals, tunnels, siphons, auxiliary dams, and other works. The key structure in the irrigation project was the pumping plant, without which the balancing reservoir and all of its gravity distribution works would remain dry. No work had been done in connection with construction of the pumping plant (except its foundations) or the manufacture and installation of the necessary pumps prior to the end of World War II.

4. The plan for early irrigation involved the expenditure of many millions of dollars and the immediate letting of numerous contracts including the manufacture of the pumps for the pumping plant, the construction of the balancing reservoir, canals, tunnels, siphons, auxiliary dams and other related works. Among the contracts so let were the contracts involved in this litigation.

Winston Bros. Company and The Utah Construction Company, a joint venture (hereinafter referred to as Winston-Utah) were awarded contracts for the construction of the "West Canal" and the "East Low Canal"; Roy L. Bair & Company and James Crick & Sons, a joint venture (hereinafter referred to as Bair-Crick) were awarded a contract for the construction of the dam at the southern extremity of the Grand Coulee known as "South Coulee Dam"; J. A. Terteling & Sons, Inc., (hereinafter referred to as Terteling) were awarded contracts for the construction of "Long Lake Dam," and portions of the main canal; and T. E. Connolly, Inc., (hereinafter referred to as Connolly) was awarded a contract for the construction of "Bacon Tunnel" and "Siphon". All of these undertakings were segments or portions of the planned gravity irrigation system. The aforesaid contracts were let in June and October 1946; those let in June were to be completed within 900 calendar days, and those let in October within 800 calendar days from time of receipt of notice to proceed. Under such a time schedule all work on such projects would have been completed in February and March of 1949.

5. Many contracts other than those of the plaintiffs here mentioned, as well as force account work, were contemplated or actually undertaken in 1946, such as the manufacture of additional power units, pumps for the pumping plant, the construction of conduits and canals from the pumping plant to the balancing reservoir, the construction of the north dam in the balancing reservoir, and many other associated works, requiring the expenditure of vast sums of money. In preparing estimates in the summer and fall of 1946 for the fiscal year July 1, 1947 to June 30, 1948, the Bureau originally estimated its requirements on the Columbia Basin Project at \$62,500,000, which was cut back by the Secretary of the Interior to \$52,500,000. The Bureau of the Budget thereafter made further drastic cuts but ultimately approved an estimate of \$27,500,000. An appropriation of \$17,500,000 for the entire Columbia Basin Project for the fiscal year 1948 was finally authorized by the Interior Department Appropriation Act of 1948, approved July 25, 1947.

6. Within a few months after the close of the war the demand for power, instead of falling off as had been anticipated, continued to increase and so continued until the present time with the result that power output at Coulee Dam has never kept abreast of the demand.

In the course of the passage of the bill making the appropriation for the Columbia Basin Project, the House of Representatives and the Senate included different amounts of money. It therefore became necessary that the bill go to a Conference Committee to resolve the disagreement. The Conference Committee agreed upon the figure of \$17,500,000. In reporting the results of the Conference to the House of Representatives, the Managers on the Part of the House added to the Conference Committee Report the following statement:

Realizing that repayment of construction cost is an essential part of the reclamation policy, and that a major portion of repayment of the cost of the Columbia Basin project must depend upon power revenues, the conferees are agreed that funds provided in the bill should be so allocated as to permit completion and installation of the six generators presently on order for this project at the earliest possible date.

This drastic reduction and the statement as to the use of the comparatively small amount available, caused the Bureau to undertake new planning and new programs, both for the contracts already let, as well as for those in contemplation, and was a matter of great concern among the Bureau officials as well as the contractors whose work was then in progress.

7 In order that existing construction and supply contracts and limited force account operations could proceed on schedule for the entire fiscal year of 1948 on the Columbia Basin Project a minimum total of \$37,359,000 would have been required whereas, due to the reduced appropriations, there was estimated in

August 1947 to be only \$21,340,000 available including an estimated unexpended balance of \$3,840,000,¹ carried over from the previous fiscal year. A cut-back of \$16,019,000 therefore had to be made.

On August 4, 1947, a press release explaining the then financial situation with respect to the Columbia Basin Project was issued by the Bureau, and on August 6 a copy of such release was sent by letter to each contractor on the project inviting them to a conference at the Bureau Office in Ephrata, Washington. A copy of the press release and a letter of invitation, received in evidence as Plaintiffs' Exhibit No. 2, are incorporated herein by reference.

8 On August 8, 1947, a statement was prepared by the Bureau for the Columbia Basin Project, entitled "Cut-Back From 'Restricted Program' to Basic Program Providing Priority for Power Installations F. Y. 1948." This statement was as follows:

Columbia Basin Project, Washington

	Restricted Program	Cut-Backs	Basic Program N
Wage Board Payrolls.....	\$3,464,000	\$1,435,000	\$2,029,000
Per Annum Payrolls.....	2,249,000	305,000	1,944,000
Denver Office Charges.....	1,200,000	217,000	983,000
Regional Office Charges.....	180,000	5,000	175,000
Earnings Under Supply Specs (Existing Contracts).....	9,845,000	3,273,000	6,572,000
Purchase Order Payments (Existing P/O).....	2,028,000	392,000	1,636,000
Right of Way and Excess Land Purchases.....	800,000	7,000	793,000
Required Materials Not Yet Under Contract.....	1,450,000	364,000	1,086,000
Freight, Service Contracts, Travel, Per Diem, etc.....	725,000	75,000	650,000
Funds Required for Pasco Unit Contracts.....	372,000		372,000
Subtotal.....	22,313,000	6,059,000	16,254,000
July Payments.....	1,079,000	8,000	1,071,000
August through January.....	7,393,000	3,378,000	4,015,000
February through June.....	6,574,000	6,574,000	
Total.....	37,359,000	16,019,000	21,340,000

Funds available:

F. Y. 1948 Appropriation.....	\$17,500,000
Carryover from F. Y. 1947.....	3,840,000

Total Funds Available..... 21,340,000

Percentage of Restricted Construction Progress Required To Stay Within Available Funds..... 54.3%

COULEE DAM, WASHINGTON, August 8, 1947.

The first column of the statement down to the sub-total of \$22,313,000 represented existing programs either directly related to, or incidental or necessary to the carrying out of the power programs. The three remaining items of \$1,079,000, \$7,393,000 and \$6,574,000 in that column (a total of \$15,046,000) showed the estimated amounts needed for each of the periods indicated so that existing contracts on the irrigation phase of the project, including the contracts here in suit, could proceed on schedule. The Bureau's interpretation of the required priority for the power program, so that it could continue throughout the remainder of the fiscal year, resulted in an allocation of \$16,254,000 of the available funds for that purpose; \$1,071,000 had already been obligated under the July 1947 estimates for the irrigation contracts so that of the total amount of \$21,340,000 available only \$4,015,000² was left to carry on the irrigation contracts for the remaining eleven months of the fiscal year 1948. This sum of \$4,015,000 represented all that remained after eliminating all projected construction not essential to the power program, including the pumping plant, feeder canals to balancing reservoir, machine shops, etc., as well as cutting back all other projected expenditures connected with the power program to the fullest extent possible consistent with what was interpreted as the intent of the Congress.

¹ In November 1947, when more accurate information was available, this carryover was found actually to be \$4,117,000 instead of the estimated \$3,840,000.

² This figure was later found to be \$4,292,000 because of the increase of the 1947 fiscal year carryover from the \$3,840,000 estimated in August to an annual \$4,117,000 in November 1947.

The irrigation contractors, including these plaintiffs, would have required an estimated total of \$13,967,000 to progress on full schedule for the eleven-month period from August 1947 to the end of the fiscal year June 30, 1948, and an estimated \$7,393,000 to continue on full schedule for the six-month period from August 1947 through January 1948. It was hoped that when Congress reconvened in January additional appropriations could be obtained, but there was no reasonable prospect at that time that additional funds could be provided prior to February 1948. With only \$4,015,000 available to carry on work requiring an estimated outlay of \$7,393,000 for the next six-month period, the Bureau and the irrigation contractors were confronted with the alternative of proceeding with full scale operations until exhaustion of such funds in about October 1947, or curtailing the work so as to keep their respective earnings within available funds until more money was available. Such a shutdown and the consequent disruption of operations would have resulted in losses greater than would have been experienced by a slowdown or curtailment.

9. The \$4,015,000 made available to the plaintiffs and other contractors involved in the Columbia Basin Project, as a result of the allocation of funds by the Bureau of Reclamation, represented about 54 percent of the estimated \$7,393,000 required for full scale operations for the six-month period August 1947 through January 1948. An allocation was accordingly made to each of the irrigation contractors on the basis of approximately 54 percent of their respective estimated requirements for that period,³ which allocation appears in the following schedule:

³ The contractors' normal requirements for the six-month period upon which the above allocations were made, were based on estimates made by the resident engineers of the Bureau on the basis of information furnished by the respective contractors early in July 1947, before the reductions in appropriations had been made.

Columbia Basin project, Washington—Construction progress permitted by allocation of \$4,015,000 for 6-month period August-January 1948

[Straight percentage basis]

	July actual	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Total Aug.-Jan.	Total July-Jan.
1231 South Coulee Dam.....	\$183,000	\$92,000	\$73,000	\$68,000	\$32,000	\$23,000	\$23,000	\$311,000	\$494,000
1236-1-3 Main Canal, Sta. 24+00 to 430+00.....	50,000	49,000	59,000	65,000	46,000	38,000	22,000	279,000	329,000
1236-2 Bacon Tunnel and Siphon.....	71,000	85,000	86,000	98,000	98,000	98,000	109,000	574,000	645,000
1286 West Canal, Sta. 2+50 to 3+50.....	58,000	110,000	122,000	122,000	68,000	54,000	54,000	530,000	588,000
1400 Potholes Dam.....	527,000	293,000	293,000	269,000	171,000	122,000	122,000	1,270,000	1,797,000
1401 Long Lake Dam.....	65,000	69,000	88,000	88,000	73,000	68,000	68,000	454,000	519,000
1422 East Low Canal, Sta. 0+25 to 650+00.....	98,000	73,000	86,000	98,000	73,000	73,000	73,000	476,000	574,000
1475 Aggregates-Adrian Deposit.....	18,000	20,000	20,000	20,000	16,000	-----	-----	76,000	94,000
1780 Aggregates-Potholes Deposit.....	1,000	10,000	10,000	10,000	8,000	7,000	-----	45,000	46,000
Total.....	1,071,000	801,000	837,000	838,000	585,000	483,000	471,000	4,015,000	5,086,000

The contracts listed in the schedule pertain to the respective plaintiffs herein as follows:

Bair-Crick, Specs. 1231, South Coulee Dam.

Terteling:

Specs. 1236-1-3, Main Canal, Stations 24+00 to 430+00.

Specs. 1401, Long Lake Dam.

Connolly, Specs. 1236-2, Bacon Tunnel and Siphon.

Winston-Utah:

Specs. 1286, West Canal, Stations 2+50 to 350+00.

Specs. 1422, East Low Canal, Stations 0+25 to 650+00.

The remaining contracts listed as 1400 Potholes Dam, 1475 Aggregates-Adrian Deposit and 1780 Aggregates-Potholes Deposit, relate to irrigation contracts other than those involved in this litigation. The Potholes Dam contract was held by Lytle, Amis & Greene and the two aggregate contracts for the furnishing of all aggregates for concrete on the other irrigation contracts were held by Green and Shotwell, respectively.

According to this schedule the suggested allocation to the four plaintiffs herein for the period August 1947-January 1948 was as follows:

Bair-Crick	-----	\$311, 000	
Connolly	-----	574, 000	
Terteling:			
Main Canal	-----	\$279, 000	
Long Lake Dam	-----	454, 000	
			733, 000
Winston-Utah:			
West Canal	-----	530, 000	
East Low Canal	-----	476, 000	
			1, 006, 000

In the allotment of available funds between the power program on the one hand and the irrigation contracts on the other, as shown in the foregoing schedule, the record does not establish that the Bureau officials were arbitrary, capricious or acted in bad faith.

10. Each of the five contracts here involved contained in the specifications an identical provision as Paragraph 11 thereof, as follows:

Failure of Congress to appropriate funds. If the operations of this contract extend beyond the current fiscal year⁴ it is understood that the contract is made contingent upon Congress making the necessary appropriation for expenditures thereunder after such current year has expired. In case such appropriation as may be necessary to carry out this contract is not made, the contractor hereby releases the Government from all liability due to the failure of Congress to make such appropriation.

11. A meeting, presided over by Mr. F. A. Banks, District Manager of the Bureau of Reclamation, at which other interested Bureau personnel and representatives of each irrigation contractor, including the plaintiffs herein, were in attendance, convened at the Bureau offices in Ephrata, Washington, on August 12, 1947, pursuant to the invitation sent out on August 6th, as above related.

Copies of the two schedules of August 8, 1947, showing cutbacks and allotments set forth in finding 8, were delivered to each of the contractors' representatives either just prior to or at the time of the meeting and they were invited by Mr. Banks to discuss the funds situation and the best method of handling it. The contractors were informed by Mr. Banks that because of the limited appropriation, and the priority required for the power installation, there would be only \$4,015,000 available for carrying on all of the irrigation contracts for the fiscal year 1948; that at the scheduled rate of progress the \$4,015,000 would be exhausted in about October 1947 in which event all work would have to be suspended until additional funds were appropriated; that if, because of the problem involved, the contractors could agree among themselves to curtail their operations for the next six months so as to keep their respective earnings within that amount, Congress would be requested when it reconvened in January 1948 to appropriate additional funds so that full operations could be resumed; that thereby the contractors' disruption would be minimized and their organizations kept intact; that the amount then available could be divided among the respective contractors in such way as they might decide among themselves; and that the manner in which any allocation made to any particular contractor might be spent, and the particular features of his work upon which he might spend it, could be determined by the

⁴As shown above, the instant contracts were entered into in June and October 1946 and were scheduled for completion in February and March 1949.

individual contractors. Resentment was shown by the contractors and protests made with respect to the insufficiency of the appropriated funds allocated to the irrigation contracts and disagreement arose among them as to the extent to which each might share in the funds made available to them. Mr. Banks thereupon suggested that the contractors meet among themselves, try to mutually resolve these problems, agree upon a recommended program, and report back at a later date.

The contractors returned to discuss the matter informally with Mr. Banks at his office in Coulee Dam at various times during the day of August 14, 1947. At the August 14th discussions, Bair-Crick requested that its tentative allotment of \$311,000 be increased to \$650,000; Terteling asked for an increase from \$733,000 to \$1,466,000; Connolly an increase from \$574,000 to \$674,000; and Winston-Utah from \$1,006,000 to \$1,300,000. Lytle, Amis & Greene, which had the Potholes Dam contract Specs. No. 1400, and had been tentatively allocated \$1,270,000 under the suggested allocation heretofore mentioned, requested an increase to \$2,200,000. The aggregate contractors (Specifications Nos. 1475 and 1780) who had been tentatively allocated \$121,000, requested an increase to \$198,000. The available funds would not permit these increased allocations and the contractors were so informed.

A subsequent meeting was held in Ephrata on August 16th, 1947, at which time the program of each contractor was carefully gone over by the conferees in order to determine the minimum amount each required. At that time the contractors reluctantly agreed among themselves, with the qualified approval of Mr. Banks, that Bair-Crick's allotment could be increased from \$311,000 to \$650,000; Terteling's would remain at the amount of \$733,000 originally proposed; Connolly could have an increase to \$674,000, which was \$100,000 over the original proposal; Winston-Utah's allotment would remain at \$1,006,000, the amount originally proposed; Lytle, Amis & Greene's allotment would be increased from the original proposal of \$1,270,000 to \$2,200,000, an increase of \$930,000; and the aggregate contractors were allotted \$180,000, an increase of \$59,000.

The final allocations were approximately \$1,430,000 in excess of the \$4,015,000 originally proposed and the contractors were told by Mr. Banks that they would be put down respectively for these amounts as their minimum requirements but that the Bureau at that time did not know from what source the excess could be obtained. So far as the evidence shows the Bureau was able to meet these increased allotments. This could be accounted for by the increase in carryover from 1947; by the fact that supplemental appropriations became available in December 1947 instead of January 1948, as had been anticipated; and by the fact that some of the contractors did not earn all funds respectively allocated during the curtailment period.

These final allocations were decided upon by agreement among the contractors in an effort to adjust their respective programs to the unsatisfactory situation confronting them through no fault of their own and to cooperate with the Bureau to the end that the work might conform as closely as possible to the limits of the funds allocated by the Bureau. Without some allocation in definite amounts to each contractor, some of the contractors were in a position to benefit at the expense of the others. The Potholes Dam, for example, had reached a point in construction where an accelerated construction schedule could have consumed the greater portion of the available money in a very short period of time while other contractors' earnings would necessarily be spread over longer periods due to the nature of the particular work then being performed.

The rate of progress already attained, the extent of completion and the condition of the work under the respective contracts in August 1947, rendered it impracticable to make the allocations to each individual contractor in strict accordance with any rigid formula applied uniformly to all. Lytle, Amis & Greene, for instance, needed to be assured of ample funds to bring the earth fill in their dam excavation to a height where winter and spring floods would not damage it and some \$900,000 additional funds were allocated for that purpose. Terteling and Winston-Utah each had two contracts in progress which permitted them an election as to the contract on which normal operations would proceed and on which contract work would be curtailed. Connolly had only one contract but two separate items of construction were involved, one being tunnel construction and the other concrete siphon construction, thus permitting that contractor a choice of operations. Bair-Crick was granted an additional \$100,000 under the condition that it continue to hold expenditures to a minimum and maintain only such construction operations as would permit it to retain the nucleus of their organization. All of the irrigation contractors here involved continued to operate in varying degrees during the entire fiscal year 1948.

12. The contractors were assured by Mr. Banks during the aforesaid meetings that appropriate extensions of time for completion of their respective contracts would be granted; but that for reimbursement of losses, if any, due to the slow-down or curtailment, the contractors would have to look to their respective contracts. He assured the contractors that their rights under such contracts would be respected. Mr. Banks stated to those in attendance that he would recommend that the extensions of time be effected by change orders indicating the funds allocated to the respective contractors. Mr. Banks' authority did not extend to the issuance of change orders, but, subsequent to the meetings, authority was granted him to negotiate with the respective contractors for suitable change orders on the condition that any such orders were not to become effective until approved by the Chief Engineer, who was the contracting officer.

On or about September 1, 1947, drafts of proposed change orders were prepared under Mr. Banks' direction and sent to each of the contractors for negotiation, of which the following relating to Winston-Utah is typical:

The Congress by failing to appropriate sufficient funds to carry on the full amount of work under contract on the Columbia Basin Project has made it necessary to curtail your operations in connection with the construction of the portion of the West Canal covered by Specifications No. 1286.

Therefore, pursuant to the provisions of Article 3 of the contract with you dated June 28, 1946, (Symbol I2R-16197) the following change is hereby ordered in the specifications:

1. In lieu of the provisions of paragraph 22 of Specifications No. 1286, regarding the commencement, prosecution and completion of the work, you are directed to curtail your construction operations in such manner that payments due you for work performed in the period from July 25, 1947, to January 25, 1948⁵ will not exceed \$1,006,000.⁶

Except as modified herein, all work shall be performed in accordance with the provisions of Specifications No. 1286 where these are applicable, as determined by the contracting officer, or otherwise as directed by the contracting officer.

Adjustment of the amount due under the contract and/or in the time required for its performance by reason of this change will be made as follows:

You will be paid for the items of work listed in the schedule of Specifications No. 1286 at the contract unit prices bid as though no change had been made;

Since you are also performing work under contract (Symbol I2R-16796), Specifications No. 1422 for which funds are also curtailed you may, at your option perform work on that contract and be paid therefor at the contract unit prices bid in the schedule of Specifications No. 1422 up to the amount stated in this Order for changes provided that payments made for work performed under Specifications No. 1422 will correspondingly reduce the amount available for payment under this Order for Changes.⁷

The time allowed for the completion of the work covered by Specifications No. 1286 will be extended 170 calendar days.⁸

The proposed change orders were not acceptable to any of the contractors and no such change orders were ever issued. The contractors' objections generally related to the extensions of time allowed and the failure of the proposed change orders to specifically state that the contractors' rights to recover damages for delay were reserved.

13. Although the specific delay to any particular contractor was impossible of ascertainment at that time, the contractors were interested in learning what extensions would be allowed so that they could replan and reschedule their operations and their construction programs. As above related, the new plan contemplated the suspension of all work on the pumping plant, which was the key structure in supplying water for irrigation so that the urgency which had theretofore existed in finishing the canals, siphons and auxiliary dams in time for the

⁵ All estimates for monthly payment vouchers on each of the contracts covered the period from the 25th of one month to the 25th of the following month. Thus, the August 1947 pay voucher would be based on estimates of work accomplished during the period from July 25th to August 25th and in like manner as to each month work was performed.

⁶ Each proposed order stated the amount finally allocated to each contractor as set forth in Finding 11.

⁷ A similar paragraph did not appear in connection with Connolly and Bair Crick since each had only one contract.

⁸ See Finding 13 post for the basis on which extensions of time were computed under each of the contracts here involved and the additional time allowed.

previously planned distribution of the water to the farm lands had been greatly relieved. Liberal extensions of time were therefore made possible without interfering with the Government's irrigation program or causing other damage to the Government's program.

The specific amount of time for performance to be allowed each contractor had not been discussed during the meetings, but following the meetings, Mr. Banks gave his attention to that subject.

In the drafts of the proposed change orders referred to above, sent out about September 1, 1947, extensions of time were proposed as follows:

Winston-Utah:	Days
West Canal, Specs. No. 1286.....	170
East Low Canal, Specs. No. 1422.....	113
Terteling: Long Lake Dam, Specs. No. 1401.....	97
Connolly: Bacon Tunnel & Siphon, Specs. No. 1236.....	146
Bair-Crick: South Coulee Dam, Specs. No. 1231.....	75

The suggestions were based on estimates prepared by Mr. Banks and his staff during the period between August 16th and September 1 1947, at which time no one knew, or could have known, the actual number of days of delay which might be encountered by each contractor as a result of their respective curtailed construction programs.

Because of the assurances given in the meetings that ample extensions of time would be allowed to replan and reschedule operations, the primary consideration in fixing the proposed time extensions was to enable each contractor to complete its contract or contracts without incurring liability for liquidated damages for delay, and in that respect allowances were made for the actual progress achieved, and delays already experienced which were unrelated to the curtailment program.

Some objections were made to the sufficiency of the proposed extensions: Winston-Utah at first thought it would be inadequate but later withdrew its objection when sufficient time to complete the work without incurring liquidated damages was granted for other reasons not related to the curtailment. Connolly refused to accept the 146 days proposed and demanded a full year's extension, and the 146 days were thereupon increased to 365 days. These same extensions originally proposed in the first part of September were incorporated, without any attempt at re-estimation or recomputation, in identical letters to each of the contractors dated November 26, 1947, signed by Mr. F. A. Banks, District manager.⁹

Typical of the letters sent out on November 26, 1947, was the letter to Terteling as follows:

This is in confirmation of the proposal made at the meetings with your representatives at Ephrata commencing on August 12 that you curtail your operations during a portion of the fiscal year ending June 30, 1948, under your above-described contract in order to extend the time at which a complete shut down of operations on the Columbia Basin Project might otherwise result because of a lack of available funds. In accordance with the informal understanding then had, your contract time for performance is hereby extended 97 days by reason of such curtailment. If the extension of time herein granted should prove to be insufficient to cover the delay in performance of your contract actually incurred as a result of the curtailment of your work pursuant to the proposal above-mentioned, I will be glad to consider an application for further extension at the proper time.

Please acknowledge the receipt hereof in the space provided below and return the original, retaining a copy for your files.

By these formal extensions, Winston-Utah was granted 170 days on the West Canal contract and 113 days on the East Low Canal contract; Connolly 365 days on his contract; Terteling 97 days on his; and Bair-Crick 75 days on theirs. No further extensions of time, by reason of curtailment of funds were granted any of the contractors and all of the contractors completed their contract work within the time as extended by these orders and for other causes unrelated thereto without incurring liability for liquidated damages and no liquidated damages were assessed against any of the contractors here involved.

14. On December 1, 1947, Mr. Banks addressed identical letters to each of the contractors here involved, of which the following to Winston-Utah is typical:

As you were informed at a conference on August 12, 1947, there were in existence at the beginning of the fiscal year ending June 30, 1948, in connec-

⁹ The one exception was in the case of Connolly, which appeared in the November 26, 1947, letter as 365 days instead of the 146 days originally suggested which was increased after Connolly's strenuous objection to the extension initially proposed.

tion with the Columbia Basin Project, a number of contracts theretofore made contingent on the necessary appropriations being made for expenditures thereunder, including your above-described contract, the estimated, aggregate, potential earnings under which contracts during the current fiscal year 1948 would exceed the funds available for the entire project during such year.

This is in confirmation of the information then given in the light of the provision of these contracts making the Government's liability thereunder contingent on there being made the necessary appropriations for expenditure thereunder. This will also advise you that unless the status of funds available for this fiscal year shall hereafter change, it is anticipated that the funds available for payments under your contract will be exhausted some time before the end of the current fiscal year, at which time, of course, no further payments can be made. While it is impossible to predict with precision exactly when that point may be reached, our best estimate in the light of the information available to us at this time is that the point of exhaustion of funds available for payments under your contract will be reached by the end of January 1948. Every effort will be made to advise you further about 30 days before the estimated date of exhaustion of available funds as that point more nearly approaches. You will, of course, be advised promptly in the event of there being made available funds in addition to those now available for contract payments in this fiscal year.

15. Congress reconvened during December 1947, and by supplemental appropriations made sufficient funds available to permit resumption of full construction schedules on the contracts here in suit for the remainder of the 1948 fiscal year.

Accordingly, on December 26, 1947, identical letters were sent by the Acting District Manager to each of the contractors herein, of which the following to Winston-Utah is typical:

In previous correspondence concerning the availability of funds for the payment of contract earnings during the fiscal year 1948 under your above numbered contract, we advised that should there be any change in the status of such funds, as then indicated, we would notify you promptly. I am glad to be able to advise you that additional funds are now available for that purpose as provided by the Third Supplemental Act, 1948.

On February 6, 1948, the actual amount made available for the remainder of the fiscal year was communicated to Winston-Utah and Connolly by letters of that date. Thereafter, the contractors were free to resume normal operations. Any reorganizing necessary could normally have been accomplished between December 26, 1947 and February 6, 1948.

Winston-Utah was informed that \$850,500 would be available under its West Canal contract, and \$960,000 under its East Low Canal contract and Connolly was informed that \$917,323 would be available under its Bacon, Siphon & Tunnel contract. The record does not contain letters to Terteling and Bair-Crick similar to the February 6, 1948 letters to Winston-Utah and Connolly. It is found as a fact, however, that similar information was mailed to or furnished these contractors at the same time.

16. Each of the contracts and specifications here involved contained the following identical provisions:

ARTICLE 3. *Changes.*—The contracting officer may at any time, by a written order, and without notice to the sureties, make changes in the drawings and/or specifications of this contract and within the general scope thereof. If such changes cause an increase or decrease in the amount due under this contract, or in the time required for its performance, an equitable adjustment shall be made and the contract shall be modified in writing accordingly. No change involving an estimated increase or decrease of more than Five Hundred Dollars shall be ordered unless approved in writing by the head of the department or his duly authorized representative. Any claim for adjustment under this article must be asserted within 10 days from the date the change is ordered: *Provided, however,* That the contracting officer, if he determines that the facts justify such action, may receive and consider, and with the approval of the head of the department or his duly authorized representative, adjust any such claim asserted at any time prior to the date of final settlement of the contract. If the parties fail to agree upon the adjustment to be made the dispute shall be determined as provided in article 15 hereof. But nothing provided in this article shall excuse the contractor from proceeding with the prosecution of the work so changed.

ARTICLE 9. Delays—Damages.—If the contractor refuses or fails to prosecute the work, or any separable part thereof, which such diligence as will insure its completion within the time specified in article 1, or any extension thereof, or fails to complete said work within such time, the Government may be written notice to the contractor, terminate his right to proceed with the work or such part of the work as to which there has been delay. In such event the Government may take over the work and prosecute the same to completion, by contract or otherwise, and the contractor and his sureties shall be liable to the Government for any excess cost occasioned the Government thereby. If the contractor's right to proceed is so terminated, the Government may take possession of and utilize in completing the work such materials, appliances, and plant as may be on the site of the work and necessary therefor. If the Government does not terminate the right of the contractor to proceed, the contractor shall continue the work, in which event it will be impossible to determine the actual damages for the delay and in lieu thereof the contractor shall pay to the Government as fixed, agreed, and liquidated damages for each calendar day of delay until the work is completed or accepted the amount as set forth in the specifications or accompanying papers and the contractor and his sureties shall be liable for the amount thereof. *Provided*, That the right of the contractor to proceed shall not be terminated or the contractor charged with liquidated damages because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the Government, acts of another contractor in the performance of a contract with the Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delays of sub-contractors due to such causes, if the contractor shall within 10 days from the beginning of any such delay (unless the contracting officer, with the approval of the head of the department or his duly authorized representative, shall grant a further period of time prior to the date of final settlement of the contract) notify the contracting officer in writing of the causes of delay, who shall ascertain the facts and the extent of the delay and extend the time for completing the work when in his judgment the findings of fact justify such an extension, and his findings of fact thereon shall be final and conclusive on the parties hereto, subject only to appeal, within 30 days, by the contractor to the head of the department concerned or his duly authorized representative, whose decision on such appeal as to the facts of delay and the extension of time for completing the work shall be final and conclusive on the parties hereto.

ARTICLE 16. Payments to contractors.—(a) Unless otherwise provided in the specifications, partial payments will be made as the work progresses at the end of each calendar month, or as soon thereafter as practicable, on estimates made and approved by the contracting officer. In preparing estimates the material delivered on the site and preparatory work done may be taken into consideration.

Specifications, par. 11.

Failure of Congress to appropriate funds. If the operations of this contract extend beyond the current fiscal year, it is understood that the contract is made contingent upon Congress making the necessary appropriation for expenditures thereunder after such current year has expired. In case such appropriation as may be necessary to carry out this contract is not made, the contractor hereby releases the Government from all liability due to the failure of Congress to make such appropriation.

Specifications, par. 22.

Commencement, prosecution, and completion of work. The contractor shall begin work within thirty (30) calendar days after date of receipt of notice to proceed and shall complete all of the work within nine hundred (900) calendar days¹⁰ from the date of receipt of such notice. Delays due to the operation of the national priorities system effective subsequent to the date of the bid will be considered to be delays due to unforeseeable causes and beyond the control of the contractor. The capacity of the contractor's construction plant, sequence of operations, method of operation, and the forces employed shall, at all times during the continuance of the contract,

¹⁰ Terteling's contract and Winston-Utah's East Low Canal contracts specified 800 days.

be subject to the approval of the contracting officer and shall be such as to insure the completion of the work within the specified period of time.

Specifications, par. 23.

Liquidated damages. The contractor shall pay to the Government, as fixed, agreed, and liquidated damages, the sum of three hundred dollars (\$300) per day for each schedule for each calendar day's delay.¹¹

The contract and specifications as to each contractor herein are now in evidence as Joint Exhibits Nos. 1, 2, 3, 4, and 5, and are included herein by reference.

17. The effect of the shortage of funds on each of the several contracts and contractors here involved varied according to the nature of the work, the progress attained at the time of curtailment, the prospects of completing the work within the contract period, weather conditions, and other factors.

Included in the types of work in the various contracts were such unrelated construction items as: canal excavation (both common and rock); concrete tunnel lining; excavation for dam foundations; sorting, placing and compaction of earth fill in dams; and placement of riprap in dams.

Weather conditions affect various items of work in varying degrees. For example, earth fill cannot be performed when frozen, or at freezing temperatures, or when too moist, or too dry. Concrete placing operations other than in tunnels cannot be performed during winter months, except at increased expense due to the necessity of heating aggregates and protecting freshly placed concrete from freezing, and it is not the usual practice in that locality to place concrete during the winter months, unless it is to be placed in areas naturally protected from the elements. Earth and rock excavation can be, and is usually, carried on during the winter seasons in that area and could have been performed in the winter of 1947-1948. Winter weather also decreased the efficiency of labor.

No delays or disruptions occurring prior to August 16, 1947, or after February 6, 1948, when funds again became available, can be attributed to the curtailment program.

CLAIM OF WINSTON-UTAH

18. At all pertinent times hereinafter mentioned, Winston Bros. Company was a corporation organized under the laws of the State of Minnesota, maintaining its principal office at Minneapolis, Minnesota, and The Utah Construction Company was a corporation organized under the laws of the State of Utah, maintaining its principal office at Salt Lake City, Utah; said corporations, as joint contractors and coventurers, hereinafter referred to as "Winston-Utah", entered into two contracts with the United States, acting through the Chief Engineer of the Bureau of Reclamation, Department of the Interior, said contracts being identified, dated, providing original completion date and being in the original stated total amounts as follows:

Contract Number	Specifications Number	Date of Contract	Completion Date Originally Specified	Original Stated Contract Amount
12r-16197	1286	June 28, 1946	Feb. 11, 1949	\$2, 871, 796
12r-16796	1422	Oct. 25, 1946	Mar. 9, 1949	3, 977, 136

These contracts are hereinafter referred to as the "West Canal" and the "East Low Canal" contracts, respectively.

19. At the end of July 1947, all excavation on the West Canal was substantially completed and the trimming and concrete lining of the canals and the construction of the two concrete siphons were planned to be completed that fall. Excavation had not been completed on the East Low Canal and it was planned to continue that excavation through the winter season of 1947-48.

Plaintiff would not have performed any concrete operations either on canal lining or siphon work after November 8, 1947, at which time all such work would have been shut down for the winter.

Work on Dry Coulee Siphon No. 1 on the West Canal commenced in July 1947 and was discontinued on September 4, 1947, at which time plaintiff had completed eleven sections of the siphon. That work would have been continued until November 8, 1947, and plaintiff thereby lost 65 calendar days or 2.2 months on that phase of the work.

¹¹ Winston-Utah's West Canal contract specified \$300 per day. Winston-Utah's East Low Canal specified \$300 and \$500 per day. Bair-Crick's South Coulee Dam specified \$400 per day. Connolly's Bacon Siphon & Tunnel specified \$500 per day. Terteling's Long Lake Dam specified \$300 per day.

No concrete lining on the West Canal or concrete siphon work on the East Low Canal was done in the fall of 1947. The concrete lining equipment which had to be specially constructed was not all delivered to the site of the work until September 1947 and it could not have been assembled and set up for operation prior to September 20, 1947. Because concrete lining of the West Canal did not start on September 20, 1947, and continue until November 8, 1947, plaintiff, Winston-Utah, thereby lost 50 calendar days, or 1.7 months on that phase of the work.

Likewise the siphon forms for the East Low Canal were delivered to the site in September 1947 and could not have been assembled and set up for operation prior to September 15th. Because concrete siphon work on the East Low Canal did not commence on September 15th and continue until November 8th, plaintiff, Winston-Utah, thereby lost 55 calendar days or 1.8 months on that phase of the work.

It is reasonable to assume that except for the agreed curtailment of operations plaintiff, Winston-Utah, would have continued its concrete operations on Dry Coulee Siphon No. 1 and conducted concrete lining on the West Canal and concrete siphon work on the East Low Canal until November 8, 1947, or later. There was no slowdown or curtailment of Winston-Utah's operations prior to the discontinuance of work on the West Canal on September 4, 1947, nor was there any slowdown or curtailment of excavation in the East Low Canal at any time. Had such operations been carried on, plaintiff could have completed an additional 21 sections or more of siphon on the Dry Coulee Siphon No. 1 on the West Canal; 17,500' of canal lining on the West Canal and 48 sections or more of siphon on the East Low Canal.

These lost periods of time on the West Canal were concurrent and in any event amounted to approximately 65 days of contract time. On the East Low Canal other work such as excavation continued at a normal pace. The contract time lost by the curtailment of siphon concrete operations on the East Low Canal is, therefore, difficult to estimate, but in any event did not exceed 55 calendar days.

20. During the period from September 25 to November 8, 1947, the contractor's actual earnings on both the West Canal and East Low Canal were \$196,544.40. Had Winston-Utah performed the concrete canal lining and siphon work referred to in finding 19 above, it would have earned an additional \$756,842.11, made up of \$589,214.77 for concrete work on the West Canal and \$167,627.34 for concrete work on the East Low Canal, making a total possible earning for the period (including the actual earnings) of \$953,386.51. On the assumption that such additional work could have been performed, except for the agreement to curtail operations, there was a loss of revenue during the period representing 79.4 percent of the total possible earnings.

21 A. GENERAL AND ADMINISTRATIVE EXPENSE (PT. I OF CLAIM)

During the period September 4 to November 8, 1947, Winston-Utah incurred certain fixed costs which continued at a more or less uniform rate throughout. The books and records of the plaintiff reflect the following expenses in the nature of fixed costs during the months of September, October, and November, 1947.

General and Administrative Expenses

	Sept.	Oct.	Nov.
Salaries and wages:			
Management and supervision.....	\$2,240.09	\$1,868.10	\$1,526.74
Office.....	2,051.70	2,058.33	1,034.34
Warehouse.....	1,521.33	1,102.92	464.33
Watchmen.....		492.50	389.47
General expense:			
Telephone and telegraph (approx. min.).....	45.90	46.82	29.21
Safety and first aid.....	104.44	30.44	
Lighting expense.....	479.92	1,905.68	1,434.17
License and permits.....	6.70	6.70	6.70
Protective clothing.....	9.27	9.27	9.27
Fire protection.....	54.17	54.17	54.17
Privileges and property damage.....	25.33	25.33	25.33
Insurance:			
Equipment and supplies.....	1,310.98	1,310.98	1,310.98
Trucks and autos.....	175.04	175.04	175.04
Forgery and fidelity.....	13.68	13.68	13.68
Taxes:			
Personal property.....	653.26	653.26	653.26
Motor vehicle licenses.....	131.07	131.07	131.07
Rentals:			
Bailey bridge at \$35 per month.....	35.00	35.00	35.00
Hutments.....	4.00	4.00	4.00
Totals.....	8,861.88	9,923.29	7,296.76

Adjustment to period 9/4 to 11/8/47. (See Findings No. 19 and No. 20):

26/30ths of September.....	\$7,680.30
All of October.....	9,923.29
8/30ths of November.....	1,945.80

Total..... 19,549.39

Portion attributable to cut-back in performance during this period, or 79.4% of \$19,549.39. (See Finding No. 20)..... \$15,522.22

The fair and reasonable portion of fixed costs incurred by Winston-Utah during the slowdown period which was not recoverable from revenues received amounts to \$15,522.22.

B. MECHANICAL EXPENSE

The plaintiff makes claim for a proportionate part of certain mechanics' wages paid during the autumn of 1947, contending that the wages paid were a fixed cost. The mechanical expense claimed was affected by the slowdown of operations. The evidence supports, a finding that \$4,212.27 of this expense can be attributed to the curtailment of operations.

C. ELECTRICAL EXPENSE

The plaintiff makes claim for a proportionate part of certain wages paid electricians during the autumn of 1947, contending that the wages paid were a fixed cost. The electrical expense claimed was affected by the slowdown of operations. The evidence supports a finding that \$2,964.27 of this expense can be charged to the curtailment of operations.

D. BUS SERVICE

The plaintiff makes claim for a proportionate part of certain bus expenses alleged to have been incurred in transporting workers from their homes or the contractor's camp to and from the work areas involved under both contracts. The plaintiff contends that such expense is a fixed cost. It concedes that the initial claim is duplicated, in part, and further concedes that this bus expense does not exceed \$7,938.00.

Prior to November 1947, the bus expense was included in the plaintiff's books as part of "Truck and auto expense." After November the bus expense was carried as a separate account. The plaintiff's books and records do not support the claim in the amount of \$7,938.00. The amount claimed as a fixed cost is an estimated figure. It is found that an amount of \$1,680.69 may be properly charged to the curtailment of operations due to restriction of funds.

E. MISCELLANEOUS EXPENSE

This item of claim has been considered in computing the allocation of fixed costs under Item A, "General and Administrative Expense" above.

EQUIPMENT COSTS

22.

A. STANDBY EXPENSE ON IDLE EQUIPMENT

The plaintiff, Winston-Utah, claims standby or idle time expense for certain of its equipment used in concreting operations on both contracts. It makes no claim for other equipment engaged in excavation operations under the East Low Canal contract, the use of which equipment was not affected by the slowdown. The plaintiff contends its concreting equipment was idle for a ten-week period in September, October and November 1947; that it is entitled to compensation for the idle time in accordance with the provisions of the "Contractor's Equipment Ownership Expense" manual published by the Associated General Contractors of America, Inc.

The following statement appears in the plaintiff's written claim, Exhibit 1 to the petition:

It is readily understandable, then, that any disruption of the work progress schedules would seriously and adversely affect the cost of doing the work.

Expensive equipment, *in many instances specialized equipment which could not be used elsewhere*, would be idled.

A substantial amount of the concreting equipment used by the plaintiff on this work was equipment especially designed and manufactured for use in trimming and lining the canals and constructing the siphons under these particular contracts. The equipment used for canal construction consisted in general of several huge truss-type mobile apparatus built to fit the dimensions of this particular canal, supported by tractors traveling along the canal bottom, or on rails laid on either side of the canal banks, some equipped with scraping, leveling and tamping devices whereby the bottom and side slopes of the canal were readied for concrete, and others with concrete mixing and placing equipment, grooving machines and other such devices, all designed to increase the efficiency of trimming and lining operations on the canal. The siphon forms and jumbos also were especially designed and manufactured for use in constructing siphons of the particular dimensions of these contracts. Such special equipment has some slight speculative future use in that it might have been used by the plaintiff if it obtained other contracts for the construction of like canals or siphons, or could perhaps have been sold to the successful bidders on other such contracts. The concrete lining equipment and forms for the East Low Canal siphons were later sold to the Terteling Company and used by it on a later contract on the Columbia Basin Project for like work. The plaintiff used the West Canal Siphon forms on a later contract it obtained, known as the Soap Lake contract.

During the period of the slowdown the plaintiff had no other work on which the concreting equipment here referred to could be utilized and there was no rental market for that type of equipment. Such equipment is usually considered a job expense and not a capital asset, and is charged off to the job by amortization out of earnings.

23. On September 1, 1947, the plaintiff had concreting equipment on the work having a value of \$660,117.72. On September 9th, 29th and October 6, it acquired other equipment having a value of \$82,584.82, or a total value at some time during the pertinent period of \$742,702.54.

The motor patrols, general purpose concreting equipment and siphon concreting equipment were used in a normal manner on the work until September 4th. This equipment was idle from that date until November 8, a period of 2.2 months.

That equipment and its value are as follows:

Description:	Value
Motor Patrols.....	\$11,500.00
Car Scoop.....	3,179.86
Hoppers, Appur. Equip.....	1,766.37
Cement Silos.....	13,714.45
Spur Track.....	4,743.15
Bins & Batches.....	9,253.05
Conveyors & Hoppers.....	4,414.16
Batch Trucks.....	47,212.01
Concrete Buckets.....	649.99
BG Loaders.....	9,307.50
Mixers.....	2,945.80
Vibrators.....	4,191.82
Siphon Jumbo & Forms ¹²	61,448.17
Siphon Jumbo & Forms ¹²	39,826.65
Bender & Cutter.....	10,696.26
Welder & Tester.....	21,378.98
Total.....	246,228.22

¹² The plaintiff purchased siphon jumbos and forms prior to September 1st in the amount of \$61,448.17, and acquired additional jumbos and forms on September 8th, in the amount of \$39,826.65. The latter acquisition is assumed to be the equipment for siphon concreting under the East Low Canal contract and the proof shows that these forms could not be assembled for concreting before September 15. After September 4th the plaintiff discarded the jumbo, or traveler, therefore used in connection with the West Canal siphon concreting. However, as neither the value of the discarded traveler nor the total value of the East Low Canal siphon forms can be determined from the record, idle time on all this equipment has been computed from September 4th, thus resolving any doubt in that regard in Winston-Utah's favor.

It is considered that a fair and reasonable allowance for the increased cost to the plaintiff because of the idle time of the above-listed equipment is \$13,647.68.

24. The evidence shows that the canal lining and canal fine-grading equipment could not have been assembled for use before September 20, 1947. This equipment was therefore available for concreting, but in idle status, from that date to November 8th, a period of 1.7 months.

A listing of that equipment and its value is as follows:

Description:	Value
Slip Form.....	\$112,967.09
Pavers.....	61,091.86
Pavers.....	2,960.99
Groover.....	760.63
Groover.....	39,797.18
Backfillers & tampers.....	100,843.82
Subgrader.....	135,049.50
Rail and track.....	25,071.11
Rail handling.....	13,090.00
Template truss.....	4,842.14
Total.....	496,474.32

It is found that the increased cost to the plaintiff because of the idle time of its canal concreting and fine-grading equipment was \$26,327.00.

The total increased cost to the plaintiff by reason of idle time of its concreting equipment resulting from the shortage of funds was \$39,974.68.

25. At the time of accepting final payment under its contracts here involved, the plaintiff executed releases in which it excepted and reserved its claim in the total amount of \$184,250.08, which included an amount of \$11,536.86, for increased cost of standby or idle time for its concreting equipment.¹³

26. *Difference in cost of setting up equipment in cold weather, February and March, 1948, as compared to August and September, 1947*

During February and March 1948, the plaintiff expended \$28,152.42 for labor in erecting its concreting equipment in preparation for canal lining and siphon construction. Had this equipment been set up in August and September 1947, as it could have been, more favorable weather would have been encountered and hence greater efficiency in the labor involved. Cold weather operations usually

¹³ During the hearings in this case the plaintiff, Winston-Utah, abandoned its original method of calculating increased cost of standby or idle time for its concreting equipment, and now seeks to increase its claim from \$11,538.86 to \$61,918.83.

reduce labor efficiency at least 25 percent below normal efficiency under warm weather conditions. It is reasonable to assume that the loss in labor efficiency in setting up this equipment in the colder weather was about \$8,000,000.

27. Purchase of extra equipment in order to speed up production in siphons during 1948

On July 12, 1947 the plaintiff commenced construction of the concrete siphon sections comprising Dry Creek Siphon No. 1, a part of the West Canal contract. From July 12 to September 4 it completed eleven sections of siphon from Sections 20 to 10, inclusive, and then closed down further siphon concreting until the spring of 1948. During this period its average production was approximately one and one-half sections of siphon per week.

For this work the plaintiff used equipment consisting of two inside forms and one outside form. The outside form was moved on rails as concreting of the siphon sections progressed. The inside forms were supported by a traveler or carrier 75' in length. As the sections were completed an inside form was collapsed and moved along the traveler to a new position in conjunction with the outside form. The two inside forms were used alternately with the outside form. When moved to the proper position the inside form was expanded and held in position for the concreting of the siphon barrel by means of hydraulic jacks which were a part of the traveler. The forms and travelers were necessarily of considerable weight and of a size capable of concreting siphon sections two feet in thickness and twenty-five feet inside diameter.

Using the above described equipment the plaintiff's progress was slow. The traveler was awkward and clumsy to handle. It was difficult to align the outside and inside forms, and the hydraulic jacks failed to hold the inside form in position. It required two days to move the forms and place them in position for a new concrete pour.

Plaintiff was not satisfied with the progress being made with its form and traveler. Plaintiff's representatives informed defendant's inspectors of its difficulties with the equipment, and of its intention to change the equipment before continuing with siphon concreting in the spring of 1948. In the fall of 1947, the traveler was discarded and not thereafter used on the work.

In the spring of 1948 the plaintiff purchased an additional outside form, two travelers and other equipment to replace, in part, the equipment which had been used for siphon concreting in 1947. The total cost was \$101,813.90 which, after deducting the salvage value and the savings in cost of a paving mixer otherwise required, resulted in a net cost of \$27,813.90.

The new equipment operated satisfactorily and much more efficiently. Using the new forms and travelers, the plaintiff was able to complete an average of one section of siphon each day. The new forms were moved and reset for the succeeding pour in a period of six hours as compared to two days for the old forms used in 1947.

The cost incurred by the plaintiff in 1948 for purchase of additional siphon forms and travelers for work on the West Canal was (1) due to plaintiff's decision in 1947 to abandon the equipment then in use, because of its demonstrated inefficiency, (2) for the purpose of making up the time lost while using the unsatisfactory equipment, and (3) to make up the time lost between September 4 and November 8, 1947, because of the curtailment of funds and to avoid the necessity of operating through another winter on this phase of the project. It would appear reasonable to allow one-third of this item of \$27,813.90, namely \$9,271.30, as being an expense connected with the forced slowdown of operations.

Increased Cost of Work on Account of Difference in Cost of Cement

28.

A. CEMENT NOT USED IN 1947

If construction of the East Low Canal siphon had started in September 1947, Winston-Utah would have purchased and used 7,600 barrels of cement in such construction at that time. The cement was not purchased until the work was done in the spring of 1948, at which time the price of cement, including freight, had increased 37 cents per barrel. Accordingly, an increased cost of cement of \$2,812 was incurred.

B. CEMENT PURCHASED IN 1948 FROM SOURCES OTHER THAN THE TWO EASTERN WASHINGTON MILLS

The plaintiff contends that the slowdown of construction operations on the Columbia Basin Project in the fall of 1947 resulted in increased demand for cement from the Eastern Washington Mills in 1948; that the mills could not satisfy the demand; and that for that reason it was required to make purchases of cement from other sources in Western Washington at an increased cost of \$15,432.77. Defendant has stipulated that in 1948 the plaintiff purchased 30,995.72 barrels of cement from sources other than the two Eastern Washington Mills, at an increased cost of 49.79 cents per barrel over what it would have cost if purchased at the same time from Eastern Washington Mills.

29. The plaintiff expended \$1,928.67 in the spring of 1948 for repairing erosion to excavations for siphons which erosion would not have occurred had the siphon concrete at those points been placed in the fall of 1947. Defendant has stipulated that this cost represents a reasonable amount for the work involved.

Increased Costs Due to Raise in Wages of Carpenters

30. Commencing with the payroll period ending April 4, 1948, carpenters' wages were increased 20 cents per hour straight time and 30 cents per hour overtime over the wages in effect in the fall of 1947. Pursuant to the escalator clause of the contracts, the plaintiff has been reimbursed 65 percent of increased wages paid commencing with the payroll period ending April 4, 1948.

During the period September 4 to November 8, 1947, a period of nine weeks, no carpentry work was performed by the plaintiff in connection with concreting operations. During the comparable period of nine weeks in 1948, when concreting operations were in progress on the West Canal, the plaintiff paid wages to carpenters for 6963½ straight time and 843½ overtime hours.

In addition, the plaintiff paid wages at the higher rates for 730 straight time and 106 overtime hours in connection with the concreting operations on the East Low Canal contract. For the total of 7693½ straight time hours and 949½ overtime hours, the plaintiff paid increased wages totaling \$1,823.55. Adding 6 percent for payroll taxes and insurance increases the total to \$1,932.96. Deducting 65 percent, previously reimbursed under the escalator clause of the contracts, leaves \$676.54 as the increased costs of carpenter wages in 1948 over those which would have been incurred if the work had been performed in the fall of 1947.

31. In summation, it appears reasonable to conclude that because of the slowdown of operations in order to keep its earnings within available allocated funds, increased costs were incurred by Winston-Utah in the following amounts:

General and Administrative Expense.....	\$15, 522. 22
Mechanical Expense.....	4, 212. 27
Electrical Expense.....	2, 964. 27
Bus Service.....	1, 680. 69
Equipment Costs:	
(1) Standby Expenses on idle Equipment.....	39, 974. 68
(2) Increased Cost of setting up Equipment in cold weather....	8, 000. 00
(3) Purchase of extra equipment in 1948.....	9, 271. 30
Increased cost of cement in 1948 over what it would have cost in 1947..	18, 244. 77
Cost of repairing winter erosion.....	1, 928. 67
Increased cost due to raise in wages of carpenters.....	676. 54
Total.....	102, 475. 41

TERTELING CLAIM

32. At all pertinent times hereinafter mentioned, J. A. Terteling & Sons, Inc., hereinafter referred to as "Terteling" was a corporation organized under the laws of the State of Idaho, maintaining its principal office at Boise Idaho.

Plaintiff Terteling was engaged in work under two contracts in 1947 on the Columbia Basin Project. Contract I2r-16745, Specifications 1401, provided for the construction of Long Lake Dam. Contract I2r-16313, Specifications 1236, Schedules 1 and 3, provided for main canal construction from Station 24+00 to Station 430+00.

The Long Lake Dam contract, dated October 25, 1946, was originally scheduled to be completed February 23, 1949, and was originally in the stated amount of \$1,770,592.

33. The first information that Terteling had of a contemplated limitation of funds during the 1948 fiscal year was upon the issuance of the press release dated August 6, 1947, referred to in Finding 7.

Terteling's representatives attended the August conference above referred to and as a result of the curtailment of slowdown of operations on the irrigation contracts, Terteling elected to continue full scale operations on its contract for construction of portions of the Main Canal and to the extent that limitation on operations might become necessary to effect the curtailment or slowdown on its operations under the Long Lake Dam contract.

Plaintiff did continue full scale operations on the Main Canal contract throughout all periods here pertinent and no claim is made in connection therewith. The claim here made is for losses which are claimed to have resulted from a curtailment of operations on the Long Lake Dam contract.

34. Long Lake Dam is an earth and rock fill dam. The contract required the construction of the dam and appurtenant works including the excavation of an emergency spillway, and the excavation and concrete lining of a diversion tunnel. The construction of the main canal headworks at the dam outlet was performed under another contract, not here involved. The design of the dam called for the excavation of a cut-off wall trench to bed rock adjacent to the axis of the dam. The bottom of the trench at bed rock was to be 30' wide with 1 to 1 side slopes. Within the trench a concrete cut-off wall to a minimum height of 5' was to be constructed from abutment to abutment of the dam. The concrete cut-off wall was to rest on a concrete footing extending a minimum of 3' into bed rock.

The excavation of the cut-off trench and the construction of the concrete cut-off wall had to be performed as a preliminary to the placement of embankment materials in any given portion of the dam structure itself.

The materials used for the dam embankment were divided into four zones. Zone 1 consisted of impervious material of selected clay, sand and gravel, rolled in 6" compacted layers. This material was to be placed in the trench around and over the cut-off wall and carried upward to the crest elevation of the dam. Zone 2 consisted of semi-pervious material of selected clay, sand and gravel, increasing in permeability toward the outer slopes, rolled in 6" compacted layers. It was to be placed both upstream and downstream of Zone 1 material. Zone 3 consisted of pervious material of selected sand and gravel, increasing in coarseness toward the outer slopes, placed in 12" layers, sluiced, and compacted by travel of equipment. It was to be placed both upstream and downstream of Zone 2 material. Zone 4 was rock fill increasing in coarseness toward the outer slopes, placed in 3' horizontal layers. Each zone material was to be placed in triangular section on increasingly flatter slopes both upstream and downstream. The above described features of the work are shown on contract drawing 222 D-10013, introduced in evidence as Joint Exhibit No. 5, which is incorporated herein by reference.

35. The four zones of embankment materials were required to be placed in layers or lifts at approximately horizontal levels as the work progressed upward to the crest elevation of the dam. Therefore no substantial amount of Zones 2, 3 and 4 materials could be placed in the dam until the completion of the concrete cut-off wall and the placing and compaction of Zone 1 material the full width of the trench up to or above original ground level.

36. In August 1947, plaintiff was behind its contemplated progress schedule. Delays had been caused by the difficult excavation and special treatment necessary in faults and fissures encountered in excavating the foundations for the cutoff wall footing in the trench. These and other difficulties encountered in excavation in the cut-off wall trench substantially delayed the work.

This was a unit price contract under which Terteling was to be paid per unit of work performed for each item as defined in the specifications. Early in the work the plaintiff submitted a proposed construction program based on such items which set forth anticipated starting and completion dates of each of the several items under the contract.

According to its proposed construction program, Terteling contemplated starting Item 3, "excavation, all classes, for foundation of dam" on December 15, 1946, and completing that item of work by April 30, 1947. The work was actually completed about August 1, 1947, some three months behind schedule.

Plaintiff, Terteling, contemplated starting Item 4, "excavation, all classes, for footings of embankment cut-off wall", February 1, 1947, and completing that work by July 1, 1947. The work started in March 1947, and was completed in August 1947, more than a month behind schedule.

It contemplated commencing Item 29, "concrete in footing of embankment cut-off wall" February 15, 1947, and completing that item by June 30, 1947. The

work was started in May 1947, and completed near the end of August 1947, some two months behind schedule.

According to plaintiff's construction program, Item 30, "concrete in embankment cut-off wall" was to commence March 1, 1947, and to be completed July 15, 1947. That work actually commenced in June 1947 and on August 25, 1947, was only 55 percent completed, already some 40 days behind schedule with the work only slightly more than half completed.

Items 21 to 27, "drilling and grouting operations", were to commence February 1, 1947, and to be completed at the end of July 1947. That work was not started until May 1947, and was not completed until sometime in 1948.

Items 14 and 16, "earth fill in embankment" and "tamping of earth fill" were to commence May 1, 1947, and to be completed at the end of October 1947. These operations actually started late in August 1947, and were not completed until sometime in 1948.

The plaintiff's construction program contemplated the completion of all work under the contract by the end of December 1947, but because the aforesaid delays threw the entire contract behind schedule, there was apparently no possibility of completing the contract by the end of 1947 regardless of any slowdown of operations which might be due to curtailment of funds.

37. Work Items 3 and 4 (excavation of dam foundations and excavation of footings for cut-off wall) were key items in that, until their completion, other items of work could not proceed. Work Items 29, 30, 21, 22, 23, 24, 25, 26, and 27, relating to concrete in cut-off wall footings, concrete in cut-off wall and grouting operations followed the foundation and footing excavation, and until the completion of such excavation in the lower areas of the foundation, the commencement of Items 14 and 16 relating to hand tamping, placing and compacting of Zone 1 embankment material could not proceed.

38. The placing, hand tamping and rolling of embankment material in the cut-off wall trench, which was commenced in August 1947, was greatly restricted due to the confined area in which to work and the limited amount of equipment which could be utilized in the area, so that progress was slow. Prior to August 25, 1947, the plaintiff had hand tamped 1,031 cubic yards of material.¹⁴ During the following month ending September 25, it hand tamped and compacted by rollers an additional 26,000 cubic yards. During the month ending October 25, 1947, it tamped and compacted an additional 55,770 cubic yards. For the period October 25, to October 31, plaintiff placed an additional 12,789 cubic yards of Zone 1 material. On the latter date plaintiff closed down embankment placement operations for the winter season.

39. A. At the closedown of operations on October 31, 1947, the plaintiff had completed Zone 1 earth embankment placement to the elevation where it could commence spreading out its operations to include Zones 2, 3 and 4 materials. In the meantime, it had stockpiled a relatively small amount of material suitable for Zone 1 embankment in the process of originally excavating the cut-off wall trench. The stockpiled material was stored on both sides of the trench and covered areas in which Zones 2 and 3 materials would necessarily be placed. This material became wet and was above optimum moisture content for compacting and rolling, unless it was spread out in layers on the fill and allowed to dry. The other alternative was to move the stockpiles and replace that material, which ultimately would be used in the embankment, with fill material from borrow pits at some added expense.

B. The plaintiff's payrolls reflect an average weekly employment during July 1947 of 3,872 man hours; August 1947 an average of 4,612 man hours; September 1947 an average of 4,278 man hours; and October 1947 an average of 3,273 man hours. Plaintiff did not start a substantial reduction of its employment until the middle of October. The payroll for the week ending October 1, 1947, shows that long after the August conferences relating to a possible slowdown of operations, the plaintiff was maintaining a higher weekly employment than the average employment for the month of July 1947. As shown in finding 38, a substantially increased yardage of material was placed during the month of October 1947 over that placed the previous months. During October the plaintiff was commencing to work above the restricted trench area heretofore mentioned and hence was better able to utilize its working force and equipment.

¹⁴ Some lean concrete used to fill foundation fissures was paid for under the specification item for hand tamped materials, and is included in the 1,031 cubic yards mentioned. It should be noted that the plaintiff built and used a special wall roller for tamping in restricted areas. The descriptive words "hand tamping" as used by various witnesses includes tamping by machine.

The monthly progress payments do not reflect an immediate slowdown or curtailment of operations following the August conferences. During the month of September 1947 the plaintiff received the second highest earnings for any month in 1947, being exceeded only by March. A falling off of earnings did begin in October 1947, however.

C. The evidence shows that during the period August to October 31, 1947, when the plaintiff closed down operations, substantial progress was being made by the plaintiff in earth embankment placing operations and that delays, not directly related to the curtailment of funds, were the principal reasons the work had not progressed further by October 31. The evidence does not show that, because of limitations of funds, plaintiff Terteling curtailed its operations on Long Lake Dam in 1947 prior to closing down such operations. The evidence does show that operations were conducted to the extent practicable under the conditions prevailing through the period ending October 31, 1947.¹⁵

40. During the period August to October 31, 1947, the plaintiff continued drilling and grouting operations, completed excavation of the diversion tunnel, completed concrete lining in the invert of the tunnel, completed the upstream trash rack structures leading to the tunnel, and completed the cut and cover section of the tunnel involving excavating, concreting and back-filling operations.

After October 31, the work yet remaining in the diversion tunnel was the completion of the concrete lining exclusive of the invert, or bottom section, of the barrel. The work would have required the pouring of only 518 cubic yards of concrete for which the plaintiff would have earned, under bid Items 28 and 32, additional revenue of approximately \$27,000. The tunnel lining operation would have required four to six weeks time to complete.

Had the plaintiff elected to complete the tunnel lining operation in the fall of 1947, after October 31, it would have been put to additional expense for heating water and aggregates, expense for protecting concrete from freezing, expense of maintaining the concrete crew, camp and mess hall, and would have suffered a loss of efficiency in the work of its employees.

While it appears unlikely that plaintiff would have undertaken such tunnel work during the winter months, the evidence indicates that there would have been sufficient money to permit the earning of some \$27,000 for tunnel lining if conditions had been favorable for such undertaking.

41. Bid Item 2 of plaintiff's contract provided for "excavation, all classes, in emergency spillway channel." Under the proposed construction program, the plaintiff anticipated commencing that item of work on May 1, 1947, and completing it by November 30, 1947. Excavation of the spillway channel was not commenced until January 5, 1948, for the reasons hereinafter stated.

As early as December 1946, a change order was under consideration involving, among other things, a change in location of the spillway. The change order was not issued until December 17, 1947, and commencement of this work was not authorized prior to that date. It would have been possible for plaintiff to have begun work on the spillway prior to or in anticipation of the change order if authorized to do so by the Chief Engineer of the Bureau of Reclamation.

Payment of spillway excavation under bid Item No. 2 was for "all classes" meaning that the plaintiff received the same price per cubic yard for both common and rock excavation. The common excavation was not suitable for dam embankment and was wasted in the reservoir area above and below the dam. The excavated rock was intended to be and was used in Zone 4, the rock filled portion of the dam embankment.

42. As stated in finding 35, the work required placing the four zones of materials in approximately level layers as the dam embankment progressed. After October 31, the plaintiff could have excavated and placed only a limited amount of rock from spillway excavation in Zone 4 of the dam without exceeding permissible height limitations in relation to Zones 1, 2 and 3 materials. An alternative would have been to excavate the rock and stockpile it, at an additional expense of later rehandling and placing it in Zone 4 of the dam embankment. After January 5, 1948, the plaintiff proceeded with spillway channel excavation. The material excavated was common, or earth, through the period ending March 25, 1948. No payment was made for spillway excavation for the month of April 1948. As of May 25, 1948, a total of 10,840 cubic yards of rock was excavated and placed in Zone 4 of the dam embankment. By that date, placement of Zones 1, 2 and 3 materials had proceeded to a point which permitted the placing of Zone 4 rock fill without stockpiling.

¹⁵ Terteling's general superintendent and chief witness testified that he "hoped" to continue earth embankment operations to November 15, 1947, before being closed down by unfavorable weather conditions.

After the approval of the change order on December 17, plaintiff, on December 23, and 24, brought two shovels from Boise, Idaho, to Long Lake and commenced excavation in the spillway on January 5, 1948.

The evidence does not show that the postponement of commencement of excavation in the spillway from May 1, 1947 to January 5, 1948, was caused by the limitation of funds occurring in August 1947. The evidence does show that work on spillway excavation was undertaken promptly after the approval of the change order on December 17, 1947, which had been under consideration for about a year.

43. During the period August 15 to November 15, 1947, the plaintiff contends that except for the alleged slowdown of operations, it could have performed the following items of work in the estimated dollar value shown:

Item No.:	Value
5. Excavation, common, in open cut for outlet works.....	\$6, 300
8. Furnishing and placing steel tunnel liner plates.....	1, 800
10. Excavation, common in borrow pit No. 1 and transportation to dam embankment.....	76, 140
11. Excavation, common, in borrow pit No. 2 and transportation to dam embankment.....	131, 000
14. Earth fill in embankment.....	87, 150
15. Sluiced sand, gravel, and cobble fill.....	3, 780
17. Rock fill in embankment.....	10, 500
32. Concrete in tunnel lining (very little, no definite estimate).....	
Total.....	316, 670

This contention is not sustained by the evidence.

The evidence shows that work under Item 5 above was partially performed in the fall of 1947, before the closedown of operations. As of November 25, 1947, there remained unearned under this item approximately \$2,100. This item of work was not completed until late in 1948. Earlier completion would have interfered with the plaintiff's access roads to the spillway area and the east abutment of the dam.

All work under Item 8 had been completed prior to November 1947.

Items 10, 11, 15, and 17 relate to excavating and hauling materials from the borrow pits and spillway for placing in Zones 1, 2 and 3 in the dam. As appears in finding 38, the plaintiff shut down Zone 1 earth fill in the dam embankment on October 31, 1947. Items 10, 11, 15 and 17 were dependent upon progress of Zone 1 material placed in the cutoff trench. Prior to October 31, 1947, work had not progressed to the elevation where any substantial amount of Zones 2, 3 and 4 materials could be placed. Item 14 covered Zones 1 and 2 embankment. Substantially all embankment materials which could be placed were placed prior to October 31, 1947. It appears that it would have been practicable to continue embankment placing through November 1947 and a few days in December. After October 31, Zones 1 and 2 materials could also have been compacted without serious interference by weather conditions for a similar period. Zones 3 and 4 materials could not be placed because of height limitations necessary to be maintained between the zones.

Plaintiff also contends that the following items of additional work could have been performed in the period November 15, 1947, to March 15, 1948.

Item No.:	
2. Spillway excavation (125,000 cu. yds.).....	\$143, 750
17. Rock fill in embankment (125,000 cu. yds.).....	26, 250
32. Concrete lining in tunnel.....	27, 000
28. Furnishing and handling cement.....	2, 500
Total.....	199, 500

The evidence does not support this contention.

In previous findings it has been shown that no additional earnings in the period claimed could have been obtained on spillway excavation rock fill in embankment or concrete lining in tunnel except at additional expense, which latter item includes furnishing and handling cement. It is not established by the evidence that limitation of funds was the only reason why Terteling did not perform more work than was performed, either before or after November 15, 1947.

44. The time extension was given or agreed upon prior to the period during which delay, due to restriction of funds, could have occurred. The extension letter cannot be used as a measure of actual delay or damages, if the facts concerning what subsequently happened do not support that result.

The evidence does not establish that plaintiff Terteling incurred all the additional expenses and losses claimed during the period from August 15, 1947, to March 15, 1948, solely because of the limitation of funds resulting from the curtailment of appropriations for the fiscal year 1948. However, it is found that the following items of expense or loss could have been avoided if plaintiff had been permitted to proceed without curtailment of operations or funds, pursuant to the original plan.

Expenses of moving equipment from Long Lake Dam to other projects after shutdown, and expenses of returning equipment to Long Lake to resume operations

(1) Between the dates of August 18 and September 27, 1947, the plaintiff transferred one Northwest shovel; two dump trucks; and a light plant to other jobs. The expense to plaintiff, as shown by its books and records, was \$1,099.80.

(2) Between the dates October 15 and November 7, 1947, the plaintiff transferred to other jobs one Northwest shovel; two compressors; seven dump trucks; one pick-up truck; one light plant; one Esso bucket; one wagon drill and one caterpillar tractor. The expense to the plaintiff, as shown by its books and records, was \$200.06.

(3) On December 23 and 25, 1947, the plaintiff transferred two Northwest shovels from Boise, Idaho, to Long Lake Dam. These were not the identical shovels which had been transferred from Long Lake Dam on August 19 and October 24. The expense to the plaintiff, as shown on its books and records, was \$3,380.90.

(4) On March 23, 1948, plaintiff moved five dump trucks from Boise, Idaho, to the Long Lake Dam. Following the winter shutdown period, the plaintiff was able to expand its earth moving and placing activities. About October 31, 1947, it had completed earth fill in a portion of the cut-off wall trench and in March 1948 was in a position to commence placement of the four zones of materials in the dam. The expense to plaintiff, as shown by its books and records, was \$414.71.

Loss on idle equipment

The Contractor's Equipment Ownership Expense Manual, 1949 Edition, published by the Associated General Contractors of America, in evidence as Plaintiffs' Exhibit 11, is incorporated herein by reference. That manual sets out criteria to be followed by contractors in establishing the expense of owning and operating construction equipment. The manual provides that factors of depreciation, major repairs and overhauling, interest on the investment, storage, insurance and taxes "are expressed as a percentage of the original capital investment" (acquisition cost) of the equipment. The manual lists the many categories and items of standard construction equipment and sets out for each a percentage of the capital investment per working month as the cost of ownership and operation. The manual states on its cover "this is *not* a rental schedule." Furthermore, it does not purport to evaluate ownership expense for equipment in idle status.

The plaintiff has asserted a claim for rental or idle time of certain construction equipment, some of which was at the site of the work for the period August 15, 1947 to March 15, 1948; some of which was brought on the job on or after November 1, 1947, and after March 15, 1948; and some of which has not been shown to have been on the job at any time.

Eliminating equipment not shown to have been on the job and equipment which the plaintiff chose to bring on the job after November 1, 1947, the plaintiff's books and records reflect an original capital investment, or acquisition cost of \$97,100.68. Applying the percentages of ownership and operating expense contained in the Equipment Ownership Expense Manual indicates a monthly ownership and operating cost of \$6,290.22. When in idle status, equipment does not depreciate to the extent it does in active use, nor does it incur the expense of major repairs and overhauling required of equipment in normal operation. A fair evaluation of the plaintiff's ownership expense for such equipment, as may have been in idle status, is one-half of the operating expense, or \$3,145.11 per month.

During the period August 15, to October 31, 1947, at least a part of the equipment was being used for earth moving and embankment operations; concreting equipment was being used for constructing trash rack structures and the invert of the diversion tunnel, and grouting equipment was being used for that operation.

The record does not disclose what equipment was in full operation, what in partial operation, or what, if any, was in totally idle status during this period.

Apparently the plaintiff had no intention of continuing earth embankment operations after November 15. If the contractor could have continued both its embankment and concreting operations until November 15, 1947, as it had hoped to do, the maximum idle time for all of his equipment would have been two weeks, or a total expense for idle time of \$1,572.50.

Since it is shown that sufficient money was available to perform the work of concreting in tunnel lining for four additional weeks after November 15, 1947 (see finding 40), the plaintiff's decision to defer this work was not related to the curtailment of funds. This item is accordingly disallowed.

Percent of Boise overhead allocated to Long Lake Dam

For the period November 1, 1947, to March 15, 1948, the plaintiff's total overhead costs incurred by its home office on all jobs were \$120,913.19. During the same period its total job costs on all contracts were \$1,389,937.60, of which \$83,578.69 was incurred on the Long Lake Dam job. The percentage of costs of the Long Lake Dam job to all job costs was 6 percent. On the basis of job costs the amount of overhead allocable to the Long Lake Dam job for the 4½ month period is \$7,254.79, or \$1,612.18 per month. The amount allowed for this item is therefore \$4,836.54 for three months, November, December, 1947 and January 1948, since plaintiff learned in December 1947 that additional funds were available and it seems reasonable to assume that operations could have been resumed by February 1, 1948.

Rental and Supervision at Job Site

Additional costs, resulting from the curtailment of funds, were incurred under this heading. The amount for a three-month period is \$13,161.90.

Summary

Summarizing, it is found that plaintiff Terteling had the following expenses, which could have been avoided if it had been permitted to proceed pursuant to the original plan without any curtailment of funds:

Expense of Moving Equipment.....	\$5,095.47
Loss resulting from Idle Equipment.....	1,572.50
Boise Overhead allocated to Long Lake Dam.....	4,836.54
Rental and Supervision at job site.....	13,161.90
Total.....	24,666.41

CONNOLLY CLAIM

45. At all pertinent times hereinafter mentioned, T. E. Connolly, Inc., hereinafter referred to as "Connolly," was a corporation organized under the laws of the State of Delaware maintaining its principal office in San Francisco, California; Connolly entered into a contract with the United States, acting through the Chief Engineer of the Bureau of Reclamation, Department of the Interior, said contract being identified, dated, providing original completion date and being in the original stated total amount as follows:

Contract Number	Specifi- cations Number	Date of Contract	Completion Date Originally Specified	Original Stated Contract Amount
I2r-16311	1236-2	June 13, 1946	Mar. 7, 1949	\$3,494,420

which contract is sometimes hereinafter referred to as the "Bacon Tunnel" or "Connolly" contract.

46. Plaintiff Connolly's contract provided for the construction of the Bacon Siphon and Bacon Tunnel as a part of the main irrigation system between Stations 93+00 and 203+70, the transitions from the main canal into the siphon, from the siphon into the tunnel, and from the lower end of the tunnel into another section of the main canal, together with a short section of main canal from Station 203+70 to Station 214+00. A continuation of the main canal from the latter point under another contract carried the water into Long Lake from whence it was fed into another segment of the main canal through the Long Lake Dam headworks.

The Bacon Siphon was constructed of reinforced concrete. It is 1,013' in length (Stations 93+00 to Station 103+13) with a barrel 23' 3" inside diameter and walls 23" in thickness. The Bacon Tunnel was lined with unreinforced concrete. It is horseshoe shaped, 10,057' in length (Stations 103+13 to 203+70) and has an inside diameter at the spring line the same as the diameter of the siphon, the portion above the spring line being of the same dimensions as the upper half of the siphon.¹⁶

47. Connolly originally planned a sequence of construction operations which provided for substantial completion of the siphon before starting tunnel lining in order that the siphon forms could be used in the tunnel lining. The siphon forms were similar to those used by Winston-Utah in the construction of siphons under the contracts for the West Canal and East Low Canal. They were of steel construction, and large, expensive and complicated items of equipment needed for the forming of concrete siphon barrel sections 23' 3" inside diameter. They were so designed and fabricated that following their use in concreting the "flat runs" of siphon barrel, the upper segment could be re-used in conjunction with additional side forms in tunnel concrete lining operations.

48. In August 1947 the plaintiff was behind its contemplated progress schedule for siphon construction. Plaintiff's original program called for common and rock excavation for structures (siphon) to commence September 15, 1946, and to be completed by February 1, 1947. The work actually started February 1, 1947, and was substantially completed in August 1947. The plaintiff's original program was to start concreting the siphon barrel on April 1, 1947, and to complete that work, except the transition sections, by the end of October 1947. The siphon forms which required considerable time to fabricate had been ordered in the spring of 1947 and were ready for delivery in August 1947. In view of the curtailment, or lack of funds, Connolly canceled the order for the tunnel forms—but one carload was already on its way and arrived in August 1947. When the order was replaced in 1948, the allocation system and steel shortage made it difficult to obtain these forms. No siphon concreting was done in 1947. The first siphon concrete was poured May 24, 1948, and the "flat run" of barrel sections was completed November 19, 1948. The concreting of the transition section, connecting the siphon with the north portal of the tunnel, had to await the completion of the tunnel lining and hence was one of the last items of work. It commenced February 23, 1950, and was completed April 6, 1950.

If all siphon-forming equipment had been on the site August 18, 1947, it would have required approximately two months or until October 18, to assemble and erect the forms and the pouring of concrete in the siphons could not have commenced before the latter date.

The siphon construction required the fabrication, including welding, of large steel hoops, and the placing of reinforcing steel prior to the pouring of concrete into the assembled and positioned forms. Under the contract, the reinforcing steel was to be furnished by the defendant. Steel was in short supply at that time, and some delay was experienced in making deliveries. The first reinforcing steel arrived at the site August 21, 1947, but sufficient of the various types needed to commence the work of fabrication and placing of the reinforcing steel was not delivered until a month later, or September 21, 1947. All of this work would have been necessary before concreting operations could be performed, and would also have delayed the commencement of siphon concreting until the late fall of 1947.

49. The plaintiff originally chose to excavate the Bacon Tunnel by the so-called pilot tunnel method, working from both the north and south portals simultaneously. Under this method, a smaller tunnel than the required full dimensions is first driven to a common meeting point approximately midway between the portals. It requires the employment of two separate crews and double the amount of tunnel driving equipment. After "holing through" in the pilot tunnel the contractor must then pull back his crews and equipment and again commence excavation from one or both portals, as he may elect, to the full tunnel dimensions. In theory, by using comparable equipment and crews, a two heading operation should be completed in one-half the time required for a one-heading operation.

In the tunnel excavation operations, Connolly's principal items of equipment consisted of drilling jumbos, muckers, muck cars, narrow gage track, electric and Diesel locomotives, and ventilating equipment consisting of blowers with both canvas and metal ventilating ducts. The ventilating equipment was highly important to the safety of workers, and to the speed with which drilling, blasting

¹⁶ The above description is taken from Contract Drawings 222D-9949, 9950 and 9954, which are a part of Joint Exhibit 4. These drawings show the stationing and lengths of the siphon and tunnel by profiles, and the diameters and thickness of concrete by cross-sections.

and hauling operations could be resumed, it being necessary to clear the tunnel of gases following each blasting operation.

The rock at the face of the tunnel was drilled and loaded with explosives from the drilling jumbos. After each shot was fired, the rock was loaded by the mucking machines into the muck cars and hauled by the locomotives to designated dumps outside the north and south portals.

The original construction program provided the tunnel excavation to commence about November 15, 1946, and to be completed March 7, 1949. This work actually started December 12, 1946, and under a revised program, later adopted by the plaintiff, was completed March 25, 1949.

50. The original construction program contemplated commencement of concrete tunnel lining early in September 1947, and the completion of that work at the end of January 1949. Connolly was months behind schedule on this item of work long before the August conferences relating to the curtailment program. On July 8, 1947, before being aware of any necessity for curtailment, Connolly revised the schedule so as to postpone commencement of tunnel lining until March 1948. Tunnel lining was actually commenced May 27, 1949, and was completed December 18, 1949, for reasons hereinafter set out.

At the time of the August 1947 conferences, Connolly was already more than four months behind schedule on its siphon concreting operations with no reasonable probability of commencing such work that fall, even if all of the siphon forms could have been delivered and assembled by October 18, 1947. According to the revised program, tunnel lining was to be postponed from September 1947 to March 1948, a period of some seven months.

It was economical and feasible to continue tunnel excavation during the winter season, and that work did so continue in the winter of 1947-1948.

51. Connolly began tunnel excavation at the south portal on December 12, 1946, by the pilot tunnel method and continued until August 18, 1947, when excavation from the south portal was discontinued. Excavation was commenced at the north portal April 9, 1947, by the pilot tunnel method and continued until July 19, 1947. On that date, the plaintiff discontinued further pilot tunnel operations, pulled back to the north portal again and commenced excavating the remaining material to the full dimensions of the tunnel. On November 8, 1947, the full dimension excavation had reached the end of the north pilot tunnel and thereafter a "full face" operation was conducted. On August 8, 1948, the "full face" excavation from the north portal reached the northern extremity of the pilot tunnel originally driven from the south portal and thereafter Connolly continued bench excavation to the full dimension of the tunnel toward the south portal until March 25, 1949, when all tunnel excavation was completed. There was no slowing down or cessation of excavation operations from the north portal from the date it commenced until final completion of that work, and it was conducted on a three-shift basis throughout the entire period of excavation.

Under this one heading method of excavation the commencement of tunnel lining had to await final completion of the tunnel excavation in order to prevent one operation interfering with the other.

52. On July 8, 1947, Connolly informed defendant's resident engineer of the revised construction program above referred to, which was briefly as follows: it proposed to immediately pull back and commence a full face excavation operation from the north portal of the tunnel and continue until March 1948 when excavation would be stopped and tunnel lining commenced from that portal; to continue pilot tunnel excavation from the south portal until the middle of September 1947, then back up and start a full face operation; and to complete all tunnel excavation from the south portal by June 1948. Under this program, all tunnel concreting would have been carried on from the north portal through to the south portal until completed in December 1948.

53. Connolly had encountered some difficulties in operation as the excavation of the south portal progressed. As designed and constructed the invert or floor of the tunnel at the south portal was at an elevation some 16' below the level of an existing lake adjacent to the tunnel mouth. It was necessary to drain this lake, in the bed of which were to be constructed the outlet transition and main canal extending below the tunnel outlet under the Connolly contract in order to keep its waters out of the tunnel and to prepare the ground for the construction of the transition and main canal. The low elevation of the south portal required the laying of haul track from the portal to the dump in the muck of this lake bed, and the hauling of the tunnel waste upgrade from the portal to the dump area some 1,500' distant and about 25' higher than the pilot tunnel floor, requiring the use of booster locomotives. Because of its location in the lake bed, the track required excessive maintenance.

As the excavation progressed in the south portal, the plaintiff experienced increasing difficulty with the ventilating system. Not having steel ducts available, it used canvas and rubberized ducts from the blowers to the point of operations at the tunnel heading. The ducts leaked and failed to deliver sufficient air. This type of duct would not permit the usual practice of reversing the blowers to draw poisonous gases from the heading after blasting because the suction collapsed the ducts. The only alternative was to blow sufficient air into the tunnel to expel the gases through the tunnel proper. This was inefficient and required extended periods of time to clear the air in the tunnel. At times as the work progressed the plaintiff lacked sufficient tubing to keep the outlet within 40' or 50' of the working face, which is usually necessary for proper ventilation.

Commencing about July 15, 1947, the ventilation problems at the south portal became increasingly more critical. Tests made by the defendant's chief inspector indicated the presence of poisonous gases in the tunnel during working periods. The normal time of 30 minutes shutdown after blasting for clearing the gases from the tunnel was necessarily increased in some instances to as long as two hours.

If full face operations had been undertaken from the south portal, the elevation of the floor would have been some 14' lower than the elevation of the floor of the pilot tunnel, thereby multiplying and increasing the difficulties of tunnel waste disposal by necessitating hauls up even steeper grades than existed during the pilot tunnel operations.

North portal excavation was much more economical and efficient. For that operation, the plaintiff had available metal ducts which provided adequate ventilation to the heading. Hauling operations presented no problem, as the grade from the portal entrance to the dump was downhill into the Coulee and the grade of the tunnel itself was practically flat, being a drop of only .187 feet (about 2½ inches) per 100 linear feet of tunnel from north to south.

54. Connolly's revised program of July 8, 1947, appears to have been an optimistic one and would have been economically unsound if carried out. As stated in finding 48, the plaintiff was already several months behind schedule in siphon concreting operations. The record does not establish that the flat run of siphon concreting could have been finished in the fall of 1947. To free one or both sets of siphon forms for tunnel concreting in March 1948, would have required carrying on siphon concreting operations throughout the winter of 1947-48. The very heavy added expense for winter protection of concrete, heating of aggregates and water and loss of efficiency of workmen would have made such a program uneconomical. Measured by the progress made prior to July 1947, it is not indicated that the tunnel excavation from the south portal could have been completed by June of 1948. In its work from the north portal, which had proved to be the most efficient of the two operations, Connolly did not complete tunnel excavation until March 25, 1949, although working continuously on a three-shift basis.

55. The proof does not establish that plaintiff Connolly closed down excavation operations from the south portal on August 18, 1947, because of the curtailment of funds. At the time of the August conferences relating to curtailment, the plaintiff was advised informally that it would receive an extension of time under its contract; and plaintiff knew on August 18, 1947, that it would be possible to re-schedule its operations without incurring liability for liquidated damages for delay, which would have been in the amount of \$500 per day.

The 365 days' extension of time allowed, coupled with the difficulties encountered in the excavation at the south portal as compared with the north portal, were important factors which influenced Connolly in a decision to concentrate his efforts on the north portal, irrespective of the curtailment of funds.

56. As shown in finding 11, the plaintiff's allotment of funds for work to January 31, 1948, was \$674,000. On December 4, 1947, Connolly informed the defendant that "based upon past performance and future estimate we figure that at the end of January 1948, there would be approximately \$200,000 still available to us under the above allocation". The monthly gross estimates show that for the period August 1947 to January 1948, inclusive, Connolly earned \$452,521.39 (including escalator payments) against its allotment of \$674,000. Connolly's earnings for the month of July 1947 were \$78,762. Its average monthly earnings during the seven months period preceding August 1947 (January through July) were \$83,603, exclusive of escalator payments. Its average monthly earnings for the period August 1947 through December 1947 were \$72,958, exclusive of escalator

payments.¹⁷ It had an approximate amount of \$221,000, or 33 percent, of its allotment unobligated and available for any work under its contract, which it might have chosen to perform. So far as available funds were concerned, there was a sufficient amount to have continued south portal tunnel excavation after August 18, 1947, and to have assembled forms and poured siphon concrete that fall if Connolly had considered it economically feasible to do so. Weather conditions and the difficulty encountered in obtaining additional manpower were other factors which resulted in a policy decision by plaintiff Connolly not to resume the south portal tunnel excavation in the spring of 1948.

57. The evidence does not establish that the plaintiff Connolly suffered any delay or loss because of curtailment of funds.

BAIR-CRICK CLAIM

58. At all pertinent times hereinafter mentioned Roy L. Bair & Company was a partnership, composed of Roy L. Bair, Lester N. Johnson and William W. Singer, maintaining its principal office at Spokane, Washington, and James Crick & Sons was a partnership, composed of James Crick, Sr., James Crick, Jr., and Robert Crick, maintaining its principal office at Spokane, Washington; said partnerships, as joint contractors and co-venturers, hereinafter referred to as "Bair-Crick" entered into a contract with the United States, acting through the Chief Engineer of the Bureau of Reclamation, Department of the Interior, said contract being identified, dated, providing original completion date and being in the original stated total amount as follows:

<i>Contract Number</i>	<i>Specifi- cations Number</i>	<i>Date of Contract</i>	<i>Completion Date Originally Specified</i>	<i>Original Stated Contract Amount</i>
12r-16203	1231	June 18, 1946	Mar. 7, 1949	\$2, 775, 887

which contract is hereinafter referred to as the "South Coulee Dam" contract.

59. South Coulee Dam is situated about 30 miles southwest of Grand Coulee Dam. Together with North Coulee Dam it forms the balancing reservoir approximately 30 miles in length which impounds waters pumped into the Grand Coulee by means of the Coulee Dam pumping plant heretofore mentioned.

The South Coulee Dam contract required the construction of an earth and rock fill dam some 9,900' in length and appurtenant works, including a concrete main canal headworks, approach channel upstream of the dam leading to the headworks structure, and the first 2,400' of the main outlet canal from Station 0+00 at the headworks structure to Station 24+00. The specifications required the excavation of a trench to bedrock slightly upstream of the dam axis to be 30' wide at the bottom with $1\frac{1}{2}$ to 1 side slopes. A concrete cutoff wall to a maximum height of 10' and a minimum height of 5' was to be constructed within the trench from abutment to abutment of the dam, which would rest on a concrete footing extending a minimum of 3' into bedrock. Under the headworks structure the cut-off wall was to be constructed in a trench extending below the concrete floor.

Grout pipes were to be positioned in place in the cutoff wall footing before the concrete was poured, through which cement grout could be forced into the rock fissures and crevices under the dam and thus seal the foundation rock so as to prevent seepage of water through the rock mass under the dam.

A canal headworks structure (outlet works from the reservoir to the main canal) normal to the axis of the dam, consisting of a concrete barrel section and inlet and outlet transitions, was to be constructed at an elevation lower than the crest of the dam. After completion, the barrel section of the headworks was to be covered by the same classes of embankment materials placed in the dam structure. The work also required the construction of a roadway along the crest of the dam which after completion would form a segment of U. S. Highway 10.

The materials to be used for the dam embankment were divided into three classes or zones.¹⁸ Zone 1 consisted of impervious material of selected clay, sand

¹⁷ So-called escalator payments consisted of reimbursement to the contractor of 65 percent of the amount paid for increases in wages occurring during the term of the contract. They would, of course, affect the unexpended balance available to the contractor during the curtailment period, but increases in revenue attributable solely to escalator payments would not necessarily indicate any increase in the amount of work accomplished. Hence, in order to give a fair comparison, escalator payments have been excluded in computing the average expenditures during each of the two periods shown above.

¹⁸ As heretofore shown, Long Lake Dam constructed by Terteling was in four zones.

and gravel rolled in 6" compacted layers, to be placed in the trench and around and over the cut-off wall to the crest elevation of the dam. Zone 2, comparatively narrow in section, consisted of selected sand and gravel placed both upstream and downstream of Zone 1 material in 12" layers, sluiced, and compacted by routing of equipment. Zone 3 consisted of rock fragments and boulders from required excavation, increasing in coarseness toward the outer slopes, placed in 3' horizontal layers, both upstream and downstream of Zone 2 material. The estimated quantities of Zones 1, 2 and 3 materials needed for the completed dam were 530,000 cubic yards—105,000 cubic yards—and 920,000 cubic yards respectively.

The segment of main canal to be constructed by Bair-Crick was unlined, and there was no siphon construction under that contract. Bair-Crick therefore had no need for specially designed and fabricated equipment for siphon construction and concrete canal lining such as that required under the contracts performed by Winston-Utah and Connolly.

Bair-Crick subcontracted the bending and setting of reinforcing steel required in its concreting operations, as well as numerous other items of metal installation, to the Sparling Steel Company. The grouting of the foundation also was subcontracted.

60. In the fall of 1946, Bair-Crick submitted a proposed construction program set up in accordance with the bid items under the contract showing a scheduled completion date of November 30, 1948. By July 1947, the work had fallen several months behind schedule.

On July 2, 1947, the defendant's resident engineer, O'Donnell, telephoned to James Crick, Jr., requesting an estimate of anticipated earnings for the fiscal year 1948, and Crick suggested that O'Donnell go ahead and prepare the estimate from the knowledge he already had of Bair-Crick's operations. On July 3, 1947, on completion of such estimate, the resident engineer again telephoned Mr. Crick and read the figures to him. Mr. Crick indicated it was satisfactory and told the resident engineer to submit it. Such estimated earnings concurred in by Crick for the six months period, August 1947 through January 1948, and the actual earnings for the same period are as follows:

Month	Estimated Earnings	Actual Earnings
August.....	\$170, 100	\$234, 860. 99
September.....	134, 600	155, 366. 27
October.....	124, 600	142, 526. 82
November.....	59, 500	62, 315. 16
December.....	43, 300	55, 440. 00
January.....	43, 300	95, 388. 94
Total.....	575, 400	745, 898. 18

As shown in finding 11, the total allotment of funds to Bair-Crick during the so-called curtailment period was \$650,000 in August 1947 and increased to \$750,000 in October 1947 which was \$174,600 in excess of such estimated earnings on an unrestricted program and some \$4,000 in excess of actual earnings.

During the July 3d telephone conversation between the resident engineer and Crick, it was agreed that the progress chart of the work would be brought up to date and future estimates of earnings would be maintained for the use of both parties. From time to time during the period between July 10 and August 1, 1947, defendant's office engineer, with the knowledge and occasional collaboration of James Crick, Jr., worked out a revised progress chart, estimating future earnings under the several pay items by months, for the remainder of the contract period. During the work of preparation, certain of the figures were changed at the suggestion of Crick. Near the end of July the chart, showing estimated future earnings by months, was completed and received the approval of Mr. Crick.

The progress chart, as revised, incorporated estimated contract earnings for the six months period, August 1947 to January 1948, inclusive, as follows:

August.....	\$207, 121. 50
September.....	172, 969. 00
October.....	142, 787. 50
November.....	71, 507. 50
December.....	41, 430. 00
January.....	40, 430. 00
Total.....	676, 245. 50

The October 1947 allotment of \$750,000 was \$73,754.50 more than Bair-Crick's estimated earnings for the period, and the actual earnings of \$745,898.18 during the period of the so-called curtailment were \$69,652.68 more than the estimated earnings projected in July 1947.

The July 3d estimate of anticipated earnings and the revised construction program which Crick assisted in preparing, were based on a full unrestricted program of construction with no consideration of any future curtailment by reason of funds shortage or otherwise.

On the basis of its original construction program, Bair-Crick, by July 1947, had fallen behind anticipated progress money-wise to the extent of \$222,787.84. By January 1948, it had improved progress to the extent that, based on its original program, it was behind money-wise only \$14,510.87. The record shows no curtailment of the work in the fall of 1947 (over that originally anticipated) because of a shortage of funds.

61. The original construction program did not indicate that Bair-Crick proposed to do concrete work during the period November 15, 1947, to March 1, 1948, which corresponds with the period when such operations are usually closed down in the Columbia Basin area because of increased expense due to winter conditions. The revised program indicated that 5 percent of the concrete work in the headwork structure, of an estimated value of \$11,725, would be performed in November 1947, and then be discontinued until March 1, 1948.

The original program showed that excavation of common materials from borrow pits, and tamping and placing of earth fill in the embankment were to be discontinued on October 31, 1947, and not resumed until March 1, 1948. The revised program indicated 5 percent of this work to be done in November 1947 and then be discontinued until March 1, 1948. These were also items of work either impractical or impossible of accomplishment during winter conditions in the Columbia Basin area.

Both programs contemplated the excavation of rock for the approach channel and main canal, and the placement of Zone 3 rock fill in the embankment to continue uninterruptedly during the winter months of 1947-1948, and, as revised, during the winter months of 1948-1949.

62. Because the concrete headworks structure was to underlie the dam embankment, this was the key item of work affecting progress on the job. The final completion of the three zones of embankment, the installation of gates, hoists and other equipment within the headworks, and the construction of the roadway along the crest of the dam were all dependent upon progress made in the headworks structure concreting operations.

Bair-Crick's original program showed that the placing of concrete and reinforcing steel in the headworks structure was to commence on May 1, 1947. The revised program, as stated in finding 61, indicated that only 5 percent of this work would be done in November 1947. For reasons hereinafter set out, no concrete or reinforcing steel was placed in the headworks structure proper until some time in 1948, although the cut-off wall in the trench under the headworks structure was constructed in the fall of 1947. This only required a small amount of headworks concrete and reinforcing steel.

63. A small amount of grouting was done in the fall of 1946. The work of grouting the main curtain along the axis of the dam started March 17, 1947. The grouting subcontractor commenced working from the west end of the dam and proceeded eastward to the area of the headworks structure at Station 88+08, which location was reached August 1, 1947. The area of the headworks structure was then by-passed and the grouting continued from Station 96+20 to the eastern extremity of the dam to Station 110+00. This part of the grouting operation east of the headworks structure was suspended on August 26, 1947, because the area remaining to be grouted in the vicinity of the headworks structure was not ready for that operation. Before the grouting could be completed the cut-off wall trench passing under the headworks structure had to be excavated and the concrete and reinforcing steel work completed in the cut-off wall footing. The trench excavation was done during the period August 15 to September 9, and the footing concrete was placed during the period September 10 to September 30. The subcontractor then resumed grouting operations in the headworks structure area on October 6 and completed all of his work on November 26, 1947. There was no curtailment or slackening off of the grouting program from August to completion of the work late in November 1947 except the stoppage resulting from Bair-Crick's delay in completing the cut-off wall trench and footing under the headworks. No delay on this phase of the work, namely, grouting operations, was caused by any curtailment of operations or funds.

64. The excavation in the headworks area was chiefly rock excavation. The necessary blasting for the bulk of the excavation in the headworks proper was completed August 27, 1947. However, there yet remained trimming and scaling operations through the area, some further required excavation in the headworks outlet transition, and the excavation of the upstream, downstream and center cut-off trenches.¹⁹ Also additional rock excavation remained to be done in the approach channel and the main canal. The necessary rock excavation in the headworks structure, and the approach channel and main canal in the immediate vicinity thereof was not completed, and apparently could not have been made ready for the start of headwork concreting operations before November 1947. After that date the placing of concrete would necessarily have required the greatly added expense of heating aggregates and water, protecting the fresh concrete from freezing and the increased cost resulting from loss of labor efficiency working under winter weather conditions. As shown in finding 61, Bair-Crick did not contemplate any concreting work after November 15, in the planning of its construction operations. Furthermore, James Crick, Jr., collaborated in the preparation of a revised program for continuing work on an unrestricted basis which contemplated completing only 5 percent of the headworks structure concreting in November 1947.

65. Earth embankment operations, including placement of Zones 1, 2 and 3 materials, started on May 22, 1947, on a two-shift basis, and, except for a 10-day period in June, continued on that basis until October 20, when embankment placing of Zones 1 and 2 materials was closed down. The excavation, hauling and placing of Zone 3 rock fill continued on a one-shift basis throughout the winter of 1947-1948.

During the period May 22 to October 20, Bair-Crick placed Zones 1, 2, and 3 materials in the embankment. However, it concentrated its efforts primarily in placing Zones 1 and 2 materials, only sporadically hauling and placing Zone 3 rock fill. As a result, when the work of placing Zones 1 and 2 materials stopped on October 20, that work was well in advance of placing Zone 3 material. The method employed had two advantages. First, it allowed concentration of men and equipment in filling all low depressions in the dam foundation with the required Zone 1 material, and the bringing up of the embankment materials to an elevation which obviated the expense of dewatering when work would be resumed in the spring of 1948. Second, it provided a substantial amount of rock placement for the winter months affording continuous employment of Bair-Crick equipment and men within a restricted program. By operating on a one-shift basis after October 20, Bair-Crick was able to work continuously throughout the winter months placing Zone 3 material. The one-shift operation in the excavating, hauling and placing of Zone 3 rock fill enabled Bair-Crick to place the material in all areas which were available in the dam embankment during the winter operation of 1947-1948.

During the period May 22 to October 20, Bair-Crick utilized its entire available equipment to the fullest extent practicable. After October 20, the equipment was transferred to the Zone 3 operation and continued on a one-shift basis throughout the winter of 1947-48.

During the month of July 1947, its average daily placement was 4,505 cubic yards per day, whereas during the period August 12 to October 20, 1947, the average daily placement increased to 6,444 cubic yards.

66. At the conclusion of the work Bair-Crick executed a voucher covering the final payment under the contract. Attached thereto was a release which excepted, among others, a "claim for \$234,499.95" which was stated to be "for extra costs imposed on the contractor by reason of the curtailment of construction program effected during the fiscal year 1948 regarding which curtailment of construction program the Bureau of Reclamation has refused to provide * * * additional compensation to cover said extra costs."

67. Although the evidence shows that Bair-Crick delayed the completion of some of the construction work called for by the contract following announcement by the defendant of the plan of curtailment, the allotment of funds allowed for expenditures during the period from August 1947 to January 1948, together with the extension of time of 75 days, made it possible to complete the work involved

¹⁹ In addition to the main cut-off wall extending the full length of the dam including the headworks section, there were two additional cut off walls constructed in trenches below the elevation of the floor of the transition sections of the headworks, located both upstream and downstream of the main cut off wall.

without any appreciable financial loss. In other words, the slowdown or curtailment of operations is not shown to have been made necessary because of lack of funds.²⁰

Sparling-Connolly Subcontract

68. On March 27, 1947, plaintiff Connolly entered into a subcontract with the Sparling Steel Company, a partnership, of Seattle, Washington (hereinafter referred to as Sparling) whereby it agreed to perform certain steel work in connection with the placing of reinforcement bars for concrete construction in the Bacon Siphon and transitions, and setting the forms for curbs in the siphons.

Such subcontract contained the following relevant provisions:

* * * Sub-contractor further assumes all loss or damage arising out of the nature of the work, the action of the elements, or unforeseen difficulties which may arise or be encountered in the prosecution of the work until its acceptance, and likewise assumes all risks of every description, including all expenses incurred by or in consequence of the suspense or discontinuance of work and for well and faithfully completing the work, in the manner and as provided in said contract and specifications. * * *

10. None of the parties hereto shall be responsible one to the other for delays suffered in consequence of a suspension of the work as provided in these specifications nor delays suffered by any act or omission of the Government, nor by strikes, acts of God, or other unforeseen causes beyond the control or without the fault or negligence of the respective parties hereto sought to be charged * * *.

The Connolly claim as related to this subcontract is made up of the following items:

- (1) Wage rate increases from January 1, 1949, to completion----- \$856. 01

Defendant has stipulated that the subcontractor's books and records disclose that he paid \$856.01 more in wages in 1949 than he would have paid if the work involved had been completed in 1948. The evidence does not establish that this expense resulted from a curtailment of funds for work which Connolly had contracted to do. The steel work to be done by the subcontractor was necessarily the last work to be performed under the contract.

- (2) Claimed additional expense due to equipment purchased in August 1947 which remained in an idle status until steel work was commenced----- \$823. 67

The evidence in connection with this item is so indefinite and inconclusive as to preclude a finding as to what the amount should be, even if it were an item of expense traceable to a restriction of funds to Connolly.

- (3) Decrease in efficiency of labor in 1948-1949 as compared with 1947----- \$19, 960. 23

It is not established by the record that the amount claimed or any other amount can be charged to the curtailment of funds to Connolly.

- (4) Claimed loss of profits by Sparling on work which would have been performed on another contract which was lost by reason of the additional time required to perform the Bacon Tunnel job.

This claim is highly speculative in nature. Sparling claims loss of profits on a sub-contract he was never awarded. He could not furnish the necessary bond and the prime contractor would not waive it. He was not awarded a contract on which he bid in July 1949 and on which he assumes that he would have made the same rate of profit which he had previously made. He claims in effect that the curtailment of Connolly's funds in 1947 so adversely affected his financial resources that he lost a contract in 1949 on which he would have realized a profit of \$79,050.00.

²⁰ Bair-Crick's allotment of funds agreed to among the contractors concerned, as later increased by the representative of the contracting officer, in a total amount of \$750,000 exceeded Bair-Crick's estimates of its needs on an unrestricted basis in July 1947, for operations during the so-called curtailment period. Bair-Crick collaborated in a revised construction program which contemplated completion of the contract work in April 1949.

The end result of the August conferences was a benefit to the contractor in that Bair-Crick received an extension of contract time of 75 days which relieved it of a possible assessment of liquidated damages set out in the contract in the amount of \$400 per day.

Sparling Bair-Crick Subcontract

69. Sparling Steel Company, under a subcontract with Bair-Crick, was obligated to place the reinforcing steel required under the South Coulee Dam contract, primarily in connection with concrete to be placed in the headworks structure. In anticipation of commencing the work, reinforcing steel was ordered for deliveries commencing in the late summer and fall of 1947. The subcontractor's work did not actually commence until January 1948 and continued into 1949. As a result, it is claimed that the subcontractor incurred the following additional costs of performance which would not have been incurred but for the curtailment and slowdown.

(1) Unloading and demurrage costs incurred in unloading steel prior to commencement of operations.....	\$560. 46
(2) Increased labor costs due to wage rate increase on January 1, 1949.....	1, 447. 01
(3) Decrease in efficiency of labor in 1948 and 1949 as compared to 1947.....	24, 094. 75

It is not established by the record that any of these items of expense resulted from a curtailment of funds for work which Bair-Crick had contracted to perform.

70. In considering these claims for losses by Sparling under the subcontracts with Connolly and Bair-Crick, it should be noted that the Bill, S. 3326, refers to this court the claims of the four plaintiffs herein, all prime contractors with the Government. It makes no reference to subcontractors. There is no privity of contract between Sparling and the Government.

71. Losses and damages suffered by the plaintiffs because of a shortage of appropriated funds were as follows:

Winston-Utah.....	\$102, 475. 41
Terteling.....	24, 666. 41
Bair-Crick.....	None
Connolly.....	None
Sparling-Connolly Subcontract.....	None
Sparling-Bair-Crick Subcontract.....	None
Total.....	\$127, 141. 82

The foregoing findings of fact, opinion and report will be transmitted to the Senate of the United States, in accordance with the act of March 3, 1911, 36 Stat. 1087, as amended by the act of June 25, 1948, 28 U. S. C. 1492, 2509.

A true copy:

TEST:

[SEAL]

WILLARD L. HART,
Clerk, United States Court of Claims.

